2015 Annual Report
City of Longmont
Mosquito Control Program

Colorado Mosquito Control, LLC
7000 N. Broadway Suite 108 Denver, CO 80221
Phone 970-962-2582 Fax 866-929-1204
Website: www.comosquitocontrol.com

City of Longmont
Mosquito Management Operations

Annual Report For 2015

Table of Contents

Program Objectives

Colorado Mosquito Control, LLC (CMC) completed its 13th year of cost effective Integrated Mosquito Management (IMM) for the City of Longmont in 2015. The primary objective of this IMM Program is to monitor and reduce mosquito populations through the use of specific, environmentally sound, control techniques in order to protect its residents from the threat of mosquito-borne diseases. CMC prioritizes the detection and elimination of larval mosquitoes in aquatic habitats, in conjunction with the monitoring of adult mosquito populations through routine surveillance, in order to assess West Nile virus vector species abundance.

Open communication is maintained by CMC between the City of Longmont, the Boulder County Department of Health & Environment, the Colorado Department of Public Health and Environment and surrounding municipalities in order to ensure that the highest level of mosquito control and epizootic response is achieved. This diligent and cooperative communication is important to the City of Longmont's mosquito management program and provides significant benefit to public health throughout the entire area.

CMC's Commitment

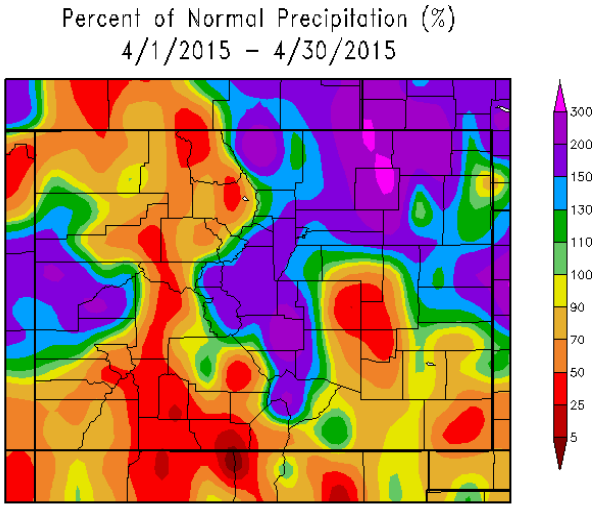
Colorado Mosquito Control is a company built on the foundations of public health, ethics, professionalism, and technical expertise. CMC is committed to providing our customers with scientifically based, environmentally sensitive and technologically advanced Integrated Mosquito Management (IMM) programs of the highest quality. All of our employees are committed to excellence in vector control and public health. We strive to improve the quality of human life in our communities through public education and the control of mosquitoes and the diseases they can transmit. CMC currently has programs across the State of Colorado, providing services for towns, cities, counties, homeowners associations, Indian reservations, and encephalitis surveillance monitoring programs for county and state health departments.

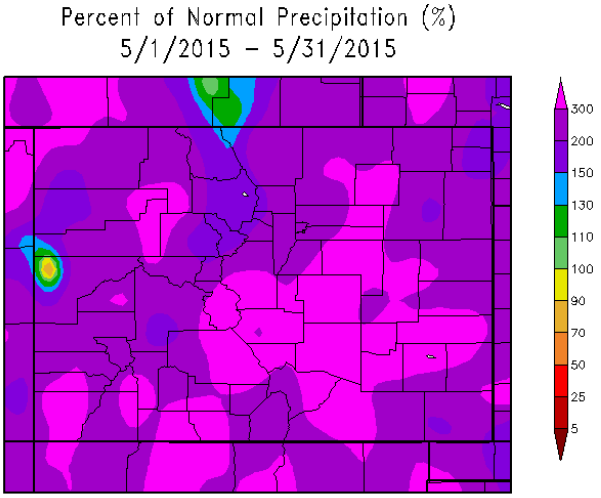
Colorado Mosquito Control, as the contractor for the City of Longmont, will continue to use proven scientific Integrated Mosquito Management techniques to survey and control local mosquito populations using bio-rational larval controls and limited low-toxicity insecticide applications. All of the methods and materials used by CMC have been reviewed and registered by the US Environmental Protection Agency, the Centers for Disease Control, the Colorado Department of Agriculture and the American Mosquito Control Association.

2015 Season Perspective

At CMC we have come to expect each Colorado summer to present a unique set of temperature, precipitation, irrigation, and human interactions that combine to create new and different challenges in both mosquito control and mosquito-borne disease proliferation. The summer of 2015 started off with record breaking rainfall and flooding along the Poudre and Platte River corridors which led to large populations of flood water mosquitoes throughout Northern Colorado.

According to the National Weather Service April was slightly warmer than normal with higher than average precipitation in Northern Colorado. The average temperature in the month of April was 49.75°F in Fort Collins, 49°F in Windsor, and 51°F in the City of Longmont. The total precipitation that occurred in the month of April 2015 was 3.32" in Fort Collins which is 161% higher than average for that time of year. Total precipitation was 1.81" in Windsor and 1.58" in the City of Longmont.



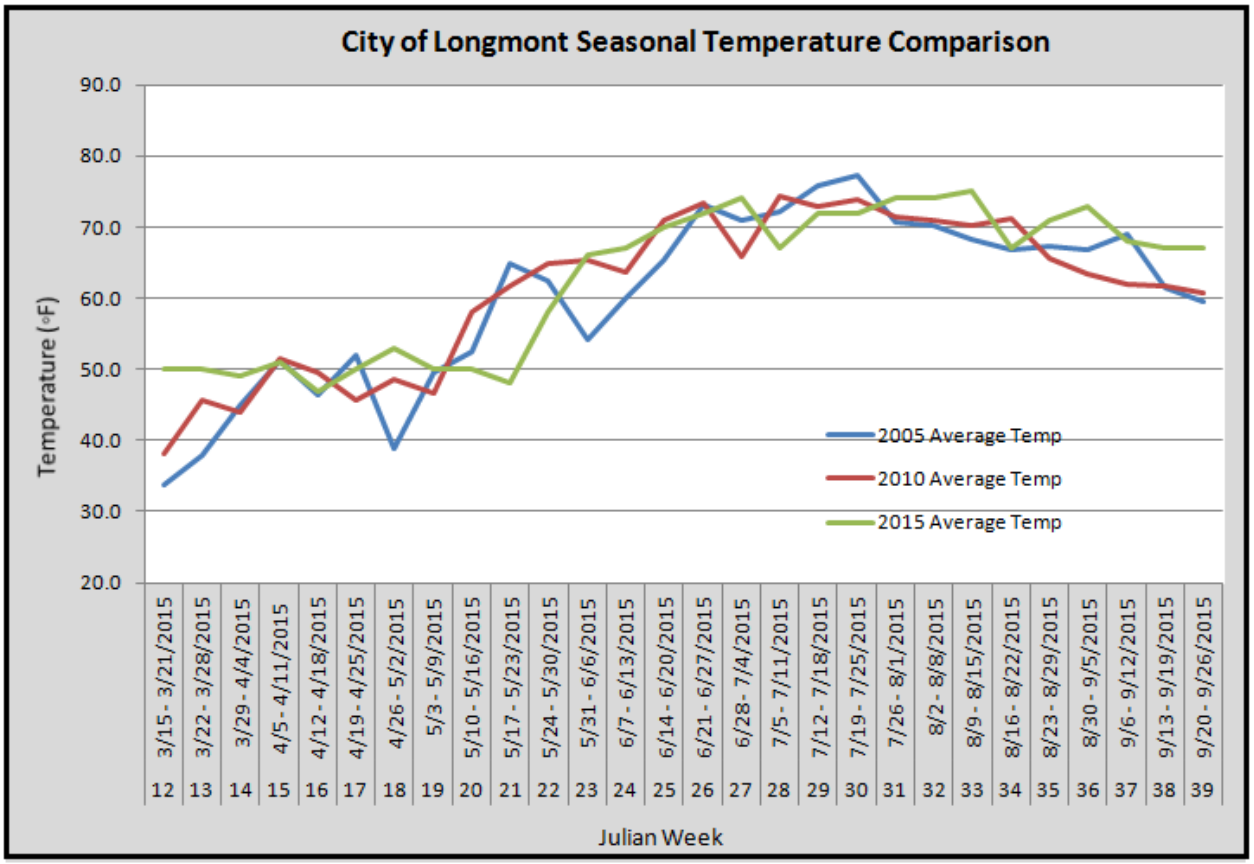


In May we saw cooler than average temperatures and again experienced well above average rainfall sustaining both *Culex* and *Aedes* larval habitat throughout the entire state. The total rainfall that fell in May 2015 was 6.34" in Loveland and Fort Collins which is 259% higher than average. The City of Longmont received a total of 3.61" of rain in May. The Town of Windsor received a total of 1.81" of precipitation. The average temperature in May was 52.75°F in Loveland and Fort Collins which is 5.25°F below average. The average temperature in Longmont was 54°F. The average temperature in Windsor was 52°F in May 2015.

Temperatures hovered 3-4°F above normal in much of Northern Colorado throughout June 2015. The average temperature in the month of June was 69.7°F in Fort Collins and Loveland, 69°F in Windsor, and 71.0°F in the City of Longmont. The total rainfall in the month of June was less than average with Fort Collins having only 1.55" compared to historical averages of 2.17" in the month of June. Windsor recorded 2.36" of rain in June 2015 and in the City of Longmont there was 1.17" of rain recorded.

Many areas along the Front Range of northern Colorado were at or slightly below normal average temperature in July 2015. The average temperature in the month of July 2015 was 71.5°F in Fort Collins and Loveland, 72°F in Windsor, and 74°F in the City of Longmont. The total rainfall in the month of July 2015 was 1.69" in Fort Collins which is directly in line with predicted precipitation data based on historical averages. We saw 0.92" in Windsor and 0.83" in the City of Longmont.

August 2015 continued to be a dry month leading to a reduction in larval mosquito habitat. The average temperature in the month of August 2015 was 67.1°F in Fort Collins which is slightly below average. The average temperature was 72°F in Windsor, and 74°F in the City of Longmont. The total rainfall that occurred in August was 0.69" in Fort Collins which is much lower than the expected average of 1.61". Average rainfall was 1.91" in Windsor and 0.22" in the City of Longmont. Nuisance reports and larval mosquito production subsided as the days became shorter and nighttime temperatures cooled into September.



West Nile Virus Season

West Nile virus (WNv) disease was first identified in Uganda in 1937. Since that time, activity has been documented throughout Africa, Europe, West and Central Asia, and areas of the Middle East. The virus made its first appearance to North America in 1999 when it was documented in New York City. WNV comes from a family of viruses known as Flaviviridae and is closely related to other encephalitis-causing viruses that can have severe effects on both humans and animals, including Western equine encephalitis and St. Louis encephalitis in our region.

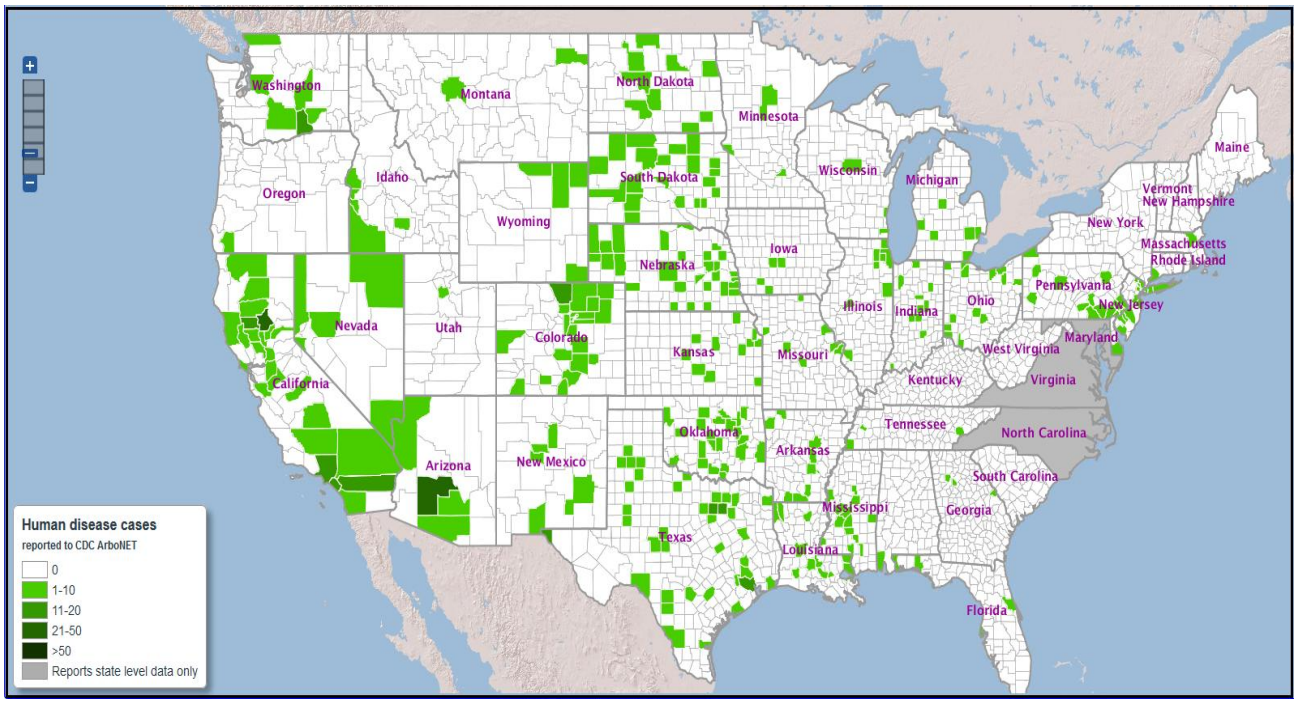
Since the introduction of WNV to the United States in New York City in 1999, the virus has made a complete westward expansion to the West Coast. Starting in the Northeastern parts of the United States, the virus steadily spread through the South, the Midwest, the Rocky Mountain region and to the Western States. This extensive distribution is due to the ability of WNv to establish and persist in the wide variety of ecosystems present across the country. WNv has been detected in 65 different mosquito species in the U.S., though it appears that only a few *Culex* species drive epizootic and epidemic transmission (WNv Guidelines CDC 2014). Although West Nile virus has been endemic to the United States since 1999, researchers continue to acquire an understanding for some of the factors which contribute to region specific spikes in vector abundance and human risk. We still do not understand why some humans develop West Nile fever while other infections develop into more serious West Nile encephalitis or West Nile meningitis cases. Additionally, physicians and researchers continue to seek answers to the variable recovery times and occurrence of deaths that result with some infections. WNv has expanded to the point that it can now be found in all 48 contiguous states and has produced two additional, large nationwide epidemics in 2003 and 2012 (WNv Guidelines CDC 2014).

As of September 22, 2015, a total of 47 states and the District of Columbia have reported West Nile virus infections in people, birds, or mosquitoes in 2015. Overall, 877 cases of West Nile virus disease in people have been reported to CDC. Of these, 538 (61%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 339 (39%) were classified as non-neuroinvasive disease.

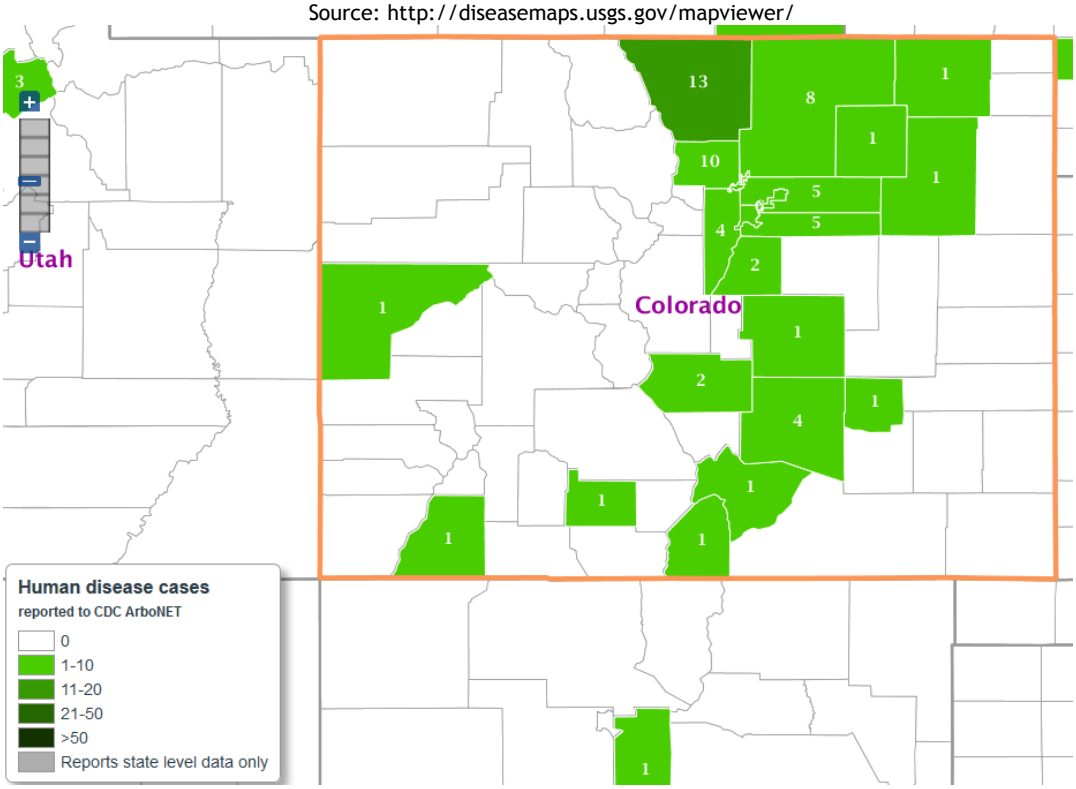
Colorado 2015

As of September 18, Colorado has identified 74 cases of human West Nile virus (WNv) infections. Of these, 30 (41%) are uncomplicated fever, 20 (27%) are meningitis, 20 (27%) are Encephalitis (including meningoencephalitis), and 4 (5%) are asymptomatic blood donors. One additional WNv associated death was reported during the most recent week. The states cumulative total for the 2015 season is now at two (one each from Crowley County and Pueblo County).

As of September 18, the Colorado Department of Public Health and Environment reports that 2054 mosquito pools have been tested for WNv along with 24 birds, 24 horses, 2 cows, 2 deer and 2 bats. One hundred and sixty-four (164) mosquito pools have tested positive for the virus. Those mosquito pools were collected in Adams (4), Arapahoe (2), Boulder (9), Delta (1), Denver (9), Jefferson (2), Larimer (100), Mesa (1), Pueblo (7) and Weld Counties (29). Twelve birds (raptors) and twelve horses have also tested positive. Of note, Larimer County continued to trap and test mosquitoes through the week of September 15, 2015.



Source: http://diseasemaps.usgs.gov/mapviewer/



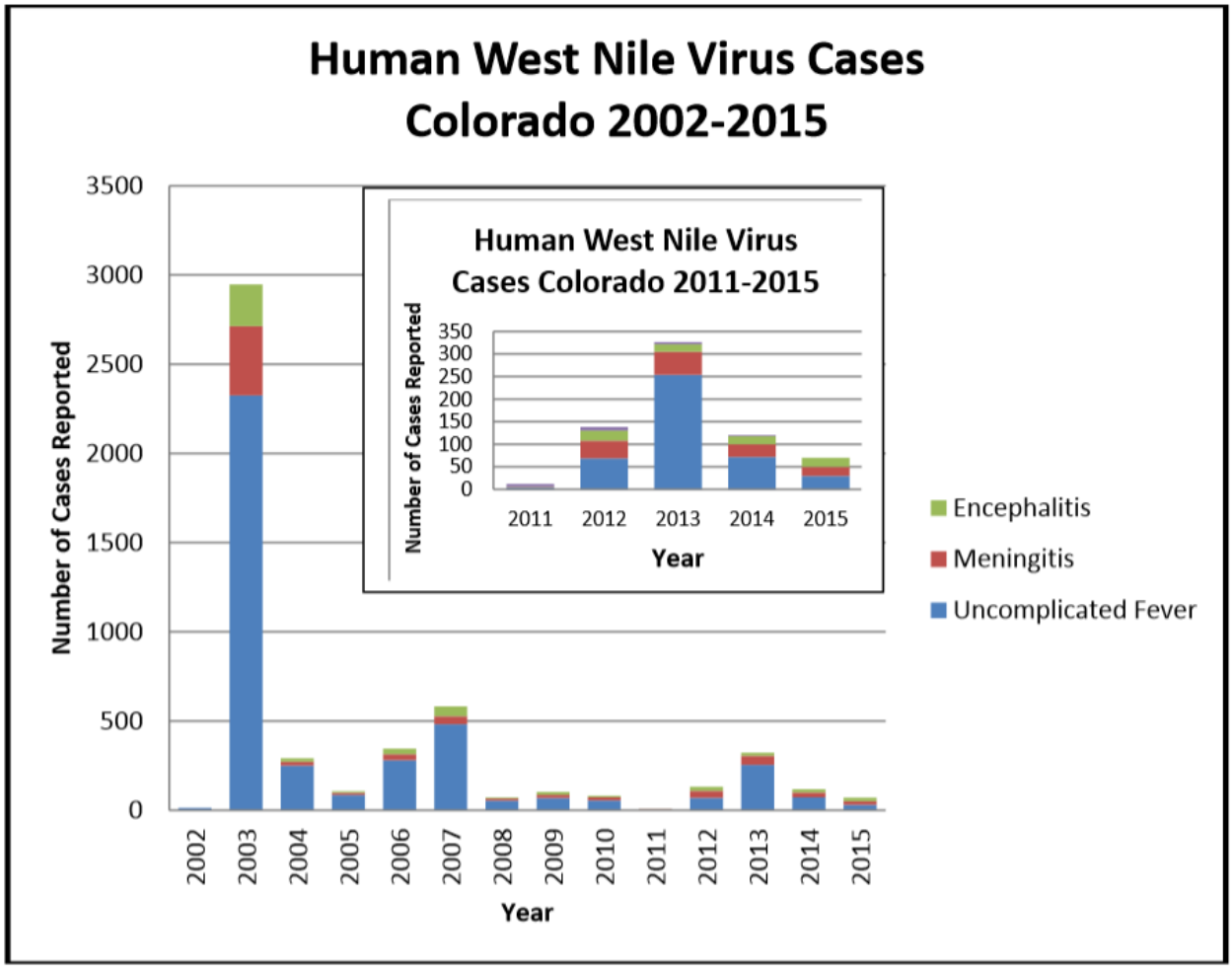
Clinical Diagnosis Associated with Human WNV Infections Colorado, 2015

Type of WNV infection	Total cases	% of Cases	Deaths
Non-neuroinvasive (fever)	30	41%	
Neuroinvasive	40	54%	2
• Meningitis	20		
• Encephalitis (Includes meningoencephalitis)	20		2
Asymptomatic (Blood Donors)	4	5%	
TOTAL	74	100%	2

Age Distribution of Human WNV cases Colorado, 2015

Age Group	Gender		Total
	Male	Female	
0-9	1	0	1
20-29	2	2	4
30-39	6	8	14
40-49	6	4	10
50-59	10	7	17
60-69	7	3	10
70-79	9	3	12
80-89	2	0	2
TOTAL	41	27	70

*Excludes 4 asymptomatic blood donors



Larval Mosquito Control

Larval mosquito control can be an extremely effective way to manage mosquitoes, thereby reducing the number of potential disease vectors and annoyances associated with biting adults. Years of research and practical experience have shown that the most effective way to control mosquito populations is through an aggressive Integrated Mosquito Management (IMM) approach. This approach aims at using a variety of concepts, tools, and products to reduce a pest population to a tolerable level.

Pre-season larval control work involved ground truthing GIS maps and remapping areas where new development or flooding had altered the landscape. CMC began larval site inspections in many areas mid-April. Hiring of seasonal field technicians began in March and continued into May. CMC's Annual Field Technician Classroom Training Day took place on May 18th with over 50 new and returning field technicians in attendance. Field training by CMC management and veteran employees lasted through May and full time field activities were in force by mid-May 2015.

The City of Longmont larval control service area includes approximately 28 square miles of private and public lands in city limits of Longmont. In 2015 the City of Longmont and Boulder County Public Health agreed to again share the cost of larval control efforts in a portion of unincorporated Weld County. The Weld County larval control service area encompasses 9 square miles of unincorporated lands, east of County Line Road, west of County Road 5, north of County Road 20.5, and south of Ute Hwy. Both entities recognize that this area presents a significant number of larval mosquito habitats, which can produce mosquitoes that will disperse into Longmont city limits and Boulder County. Additionally, Longmont city council approved an enhancement to the program in 2014 which enabled inspections at known problematic larval mosquito habitats on a 5 day cycle, with the intent to minimize multiple generations of mosquitoes from emerging.

In 2015 Colorado Mosquito Control performed 1,275 larval site inspections, of which 1,094 sites (85.8%) were wet upon inspection and 422 (38.6%) were producing mosquito larvae in the City of Longmont. An estimated 389 million mosquito larvae were eliminated before emerging as biting adults via larvicide applications. CMC applied 1244.3 lbs. of VectoBac *(Bti)*, 112.5 lbs. of Vectolex (*Bs*) and 5.4 gallons of BVA mineral oil to 161 acres of land in the City of Longmont.

In 2015 Colorado Mosquito Control performed 255 larval site inspections, of which 232 sites (91%) were wet upon inspection and 100 (43.5%) were producing mosquito larvae in the Weld County Service Area. An estimated 58.1.2 million mosquito larvae were eliminated before emerging as biting adults via larvicide applications. CMC applied 252.6 lbs. of VectoBac *(Bti)*, 2.5 lbs. of Vectolex (*Bs*) and 1.1 gallons of BVA mineral oil to 37.1 acres of lands in the Weld County Service Area.

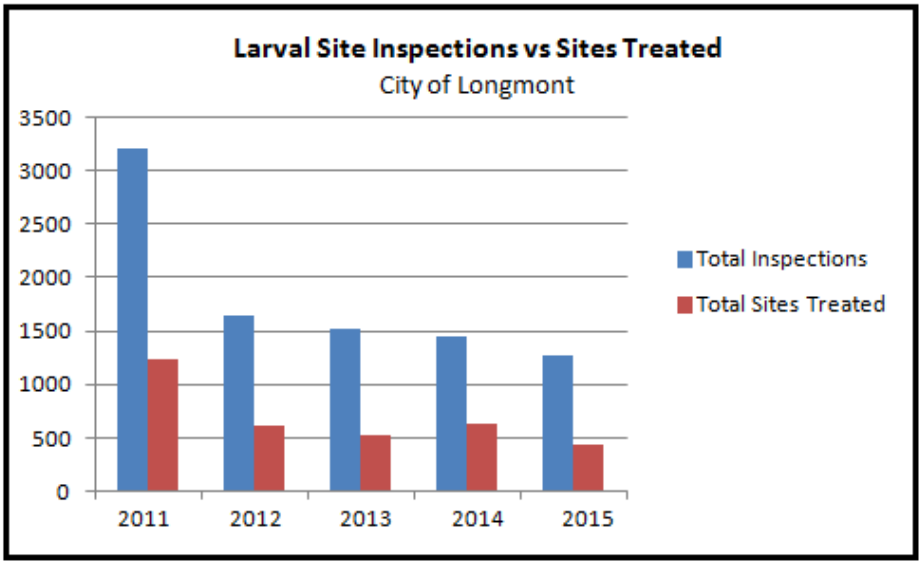
Larval mosquito control can be achieved in several ways including biological, biochemical, chemical, and mechanical means. No single larvicide product will work effectively in every habitat where mosquito larvae are found, so a variety of products and methods should be employed. Additionally, although there are a variety of methods for reducing larval populations, some may have negative consequences that outweigh their benefits. Mechanical or physical habitat modification, called Source Reduction, is a technique which CMC uses on relatively small scale projects, as the area to be modified and the extent to which the work will affect the surrounding area must be carefully reviewed. Permanent ecological damage may occur if extensive habitat change has taken place. True biological controls, such as the introduction of predacious animal species, can also cause negative environmental impacts that outweigh the benefit of their control capacity.

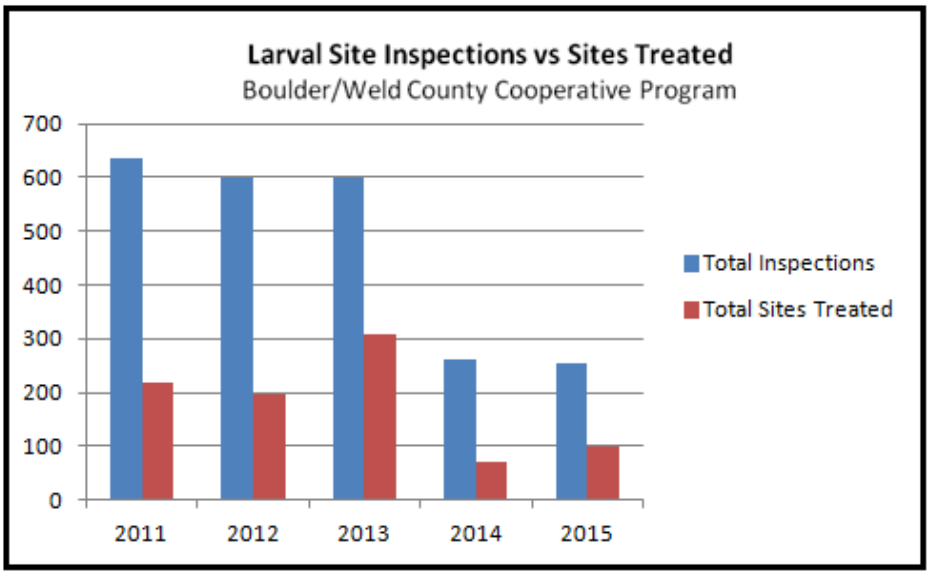
CMC's favored method of larval mosquito control is through the use of bacterial bio-rational products. The main product used by CMC is a variety of bacteria (*Bacillus thuringiensis var. israeliensis*). *Bti*, as it is known, has become the cornerstone of mosquito control programs throughout the world. The benefits include its efficacy and lack of environmental impacts. When used in accordance with its label, successful control of mosquito larvae can be achieved without impact to non-target species such as other aquatic invertebrates, birds, mammals, fish, amphibians, reptiles, or humans. A broad label allows for the use of the product in the majority of the habitats throughout the service area.

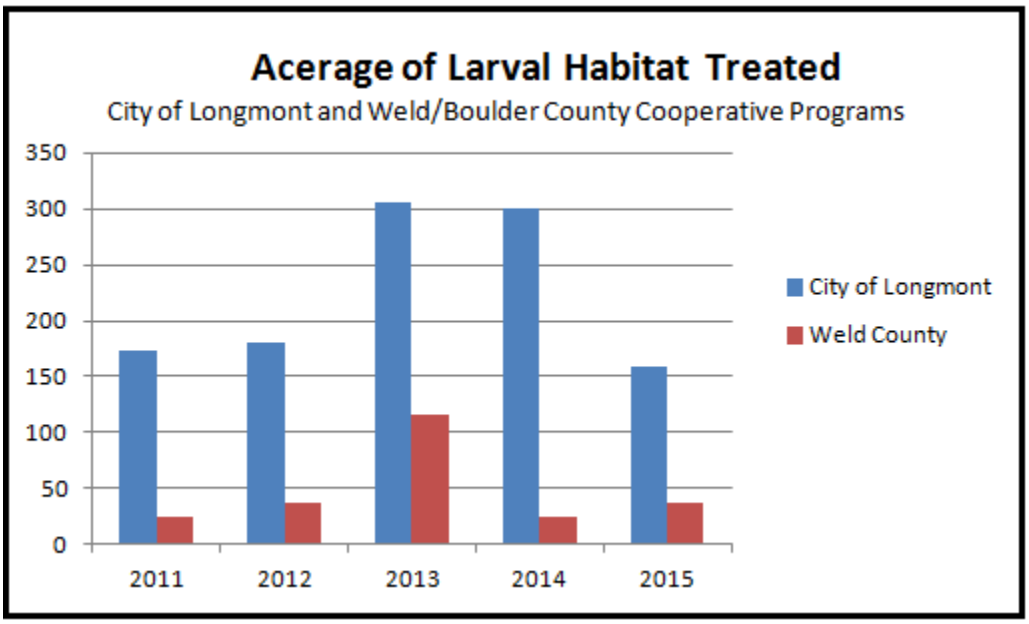
Another bacterial product closely related to *Bti* is *Bacillus sphaericus (Bs)*. *BS* provides similar benefits to *Bti* while also providing up to three weeks of residual control for certain species of mosquitoes. Due to its limitations and cost this product is often used in moderation and only applied at difficult to treat areas where *Culex* are the predominant species or we see continuous and multi-generational broods. In 2015 Vectolex was used extensively to reduce the necessity of weekly inspections at smaller sites and allow more time to be spent at larger sites.

Summary of Larval Product Usage - City of Longmont					
	2011	**2012**	**2013**	**2014**	**2015**
VectoBac (Bti) - Pounds	1465	1465	3049	2166	1244
VectoLex (Bs) - Pounds	9	16	66	16	112.5
BVA Larviciding Oil - Gallons	9	4	8	23	5.4

Other products that are sometimes used include the insect growth regulator methoprene (Altosid), light mineral oils (BVA 2 larvicide oil), and an organophosphate (Abate). Methoprene is a synthetic version of a juvenile growth hormone in larval mosquitoes. The hormone prevents the normal development of larval mosquitoes into pupae and adults, eventually causing death. Abate is an effective product, but given its effects on non-target species, label restrictions limit its use in many areas. CMC limits the use of chemical larvicides to areas with little biodiversity, such as road side ditches, or areas that chronically produce high mosquito populations. They are only used after a thorough assessment has been made of any habitat where their use is being considered. Mineral oil is the only product effective in controlling mosquito pupae and therefore is an essential tool when pupae are present.


Larval Site Inspections vs Sites Treated
City of Longmont
3500
3000
2500
2000
1500
1000
500
0
2011
2012
2013
2014
2015
Total Inspections
Total Sites Treated


Larval Site Inspections vs Sites Treated
Boulder/Weld County Cooperative Program
700
600
500
400
300
200
100
0
2011
2012
2013
2014
2015
Total Inspections
Total Sites Treated


Acerage of Larval Habitat Treated
City of Longmont and Weld/Boulder County Cooperative Programs
350
300
250
200
150
100
50
0
2011
2012
2013
2014
2015
City of Longmont
Weld County

CMC Surveillance Laboratory

Information about mosquito abundance and species diversity is essential to integrated program. Colorado Mosquito Control employs two kinds of traps to monitor mosquito populations. The most commonly used is the CDC light trap which uses carbon-dioxide from dry ice as bait to attract female mosquitoes seeking a blood meal from a breathing animal. Once attracted by the CO_2, the mosquitoes are lured by a small light to a fan that pulls them into a net for collection. The second type of trap CMC uses is called a gravid trap. Gravid traps use a tub of highly-organic water as bait to attract female mosquitoes that are looking for a place to lay their eggs. A fan placed close to the water surface forces mosquitoes that come to the water into a collection net. Once back in the laboratory, the contents of the trap nets are counted and speciated by trained technicians.

In 2015, Colorado Mosquito Control monitored a statewide network of hundreds of weekly trap sites, collecting 694,362 adult mosquitoes that were counted and identified to species by the CMC Surveillance Laboratories. While individual traps provide only limited information, trap data is interpreted in the context of historical records for the same trap site, going back in time more than a decade. Individual traps are also compared to other traps from around the region that were set on the same night and therefore exposed to similar weather conditions. Technicians working in the Surveillance Laboratories at Colorado Mosquito Control are trained to provide accurate species-level identification of both larval and adult mosquitoes.

Additionally, the CMC Surveillance Laboratories conduct an intensive larval identification program with larval mosquito samples collected by I&L technicians. This information is valuable in targeting mosquito control efforts as we gain a greater understanding of the habitat types preferred by Colorado mosquito species and the seasonality of these habitats.

Specimens and data collected from these traps and larval identification are used in:

- Determining the effect of larval control efforts. Each mosquito species prefers specific kinds of habitats for larval development. If a trap produces large numbers, it could indicate the presence of an unknown larval habitat and, based on the species identification and known habitat preference for that species, direct field technicians as to possible sources of the mosquitoes collected.

- Determining larval and adult mosquito species. This helps to illustrate the threat of mosquito-borne disease amplification and transmission because different mosquito species can vector different diseases to people and animals.

- Determining where adult control efforts were necessary. While mosquito eradication is impossible, significant population reduction can be achieved. In places where larval control is insufficient, such as neighborhoods where adult mosquitoes have migrated in from outside of the control area, it may be necessary to use adulticide methods, such as ULV truck fogging or barrier sprays of harborage areas. Trap counts that exceed an acceptable threshold for an area may trigger adult control measures.

Surveillance for Mosquito-borne Disease. Historically, CMC efforts were targeted primarily at controlling mosquito nuisance problems with limited disease surveillance. However, since the arrival of the West Nile virus in Colorado in August of 2002, the paradigm has shifted toward disease prevention and control. Accurate species identification of the mosquitoes in the traps is important when monitoring species population trends. It is also necessary for evaluating whether a population spike represents an actual increase in disease transmission potential or only an increased nuisance level.

SURVEILLANCE LIGHT TRAP DATA

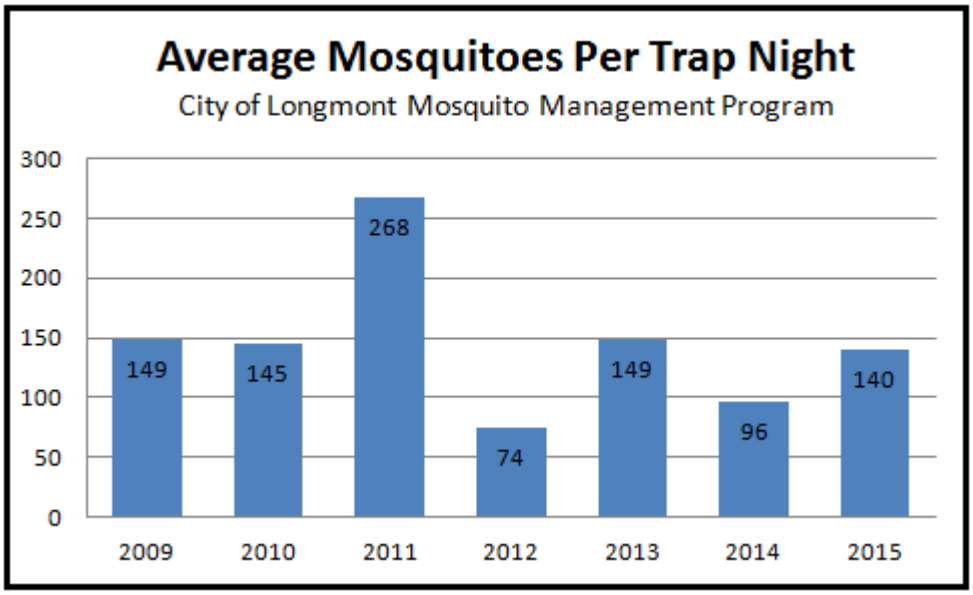
In 2015 there were 16 CDC Light Traps set on a weekly basis throughout the City of Longmont.

Trap locations for the City of Longmont include…

Jim Hamm Nature Area (LM-03)
Mountain View Cemetery (LM-09)
Garden Acres Park (LM-10)
The Shores/McIntosh Lake (LM-17)
Twin Peaks Circle (LM-18)
Sandstone Ranch (LM-22),
Union Reservoir (LM-23)
Great Western/ Mill Village (LM-27)
St. Vrain Greenway (LM-28)
Left Hand Creek at Creekside (LM-31),
Meadow View (LM-34)
Liberty Court (LM-40)
Stoney Ridge/ Alpine Elementary (LM-41)
Izaak Walton Park (LM-42)
Rough & Ready (LM-43)
Reserve at Somerset Meadows (LM-44)

This year's surveillance trapping began June 1st and ended on August 27th. There were 206 surveillance light traps set within Longmont during the 2015 season. These traps collected 28,871 total mosquitoes. The average number of mosquitoes collected per trap per night was 140 and the average number of *Culex spp.* mosquitoes collected per trap per night was 72. The percent composition of mosquitoes collected from locations in 2015 included 47.8% (13,797) *Aedes/Ochlerotatus spp.*, 51.5% (14,879) *Culex spp.*, 4 (less than 1%) *Coquillettidia perturbans*, and 184 (0.6%) *Culiseta spp.* mosquitoes.

A total of 16 species were represented in traps collected within the City of Longmont. No exotic/introduced species (such as Asian Tiger Mosquitoes) were identified this season.



CDPHE Seasonal Adult mosquito population data comparison

The Sentinel Encephalitis Surveillance Program was funded by the Colorado Department of Public Health and Environment (CDPHE) and Boulder County Public Health (BCPH) in 2015. Not all mosquitoes are tested for West Nile virus in the City of Longmont. Due to budget cutbacks associated with West Nile virus surveillance in recent years, the CDPHE does not have the ability to test mosquitoes from every location from across the state. Rather, a sample of the population is tested to better understand West Nile virus risk within the community.

CMC maintained the sentinel system with five surveillance traps at permanent locations in the City of Longmont. The five surveillance trap locations were Jim Hamm Nature Area (LM-03), Boulder County Fairgrounds (LM-06), Garden Acres Park (LM-10), St. Vrain Greenway (LM-28), and Left Hand Creek at Creekside (LM-31). All *Culex* mosquitoes were sent to and tested by CDPHE on a weekly basis. The sentinel light traps were set once a week from June 1st to August 27th. There were 64 sentinel surveillance traps set in 2015, which collected a total of 9,811 mosquitoes.

This year our Boulder County traps collected a total of 31,124 mosquitoes, compared to 23,345 mosquitoes collected in 2014, and 36,035 mosquitoes collected in 2013. A total of 16 species were represented. Again, no exotic/introduced species (such as Asian Tiger Mosquitoes) were collected this season. While overall numbers were higher than last year, the percentage of *Culex* mosquitoes collected in Boulder County was a bit lower than last year at 46.2%, compared to 54.4% in 2014 and 49.1% in 2013.

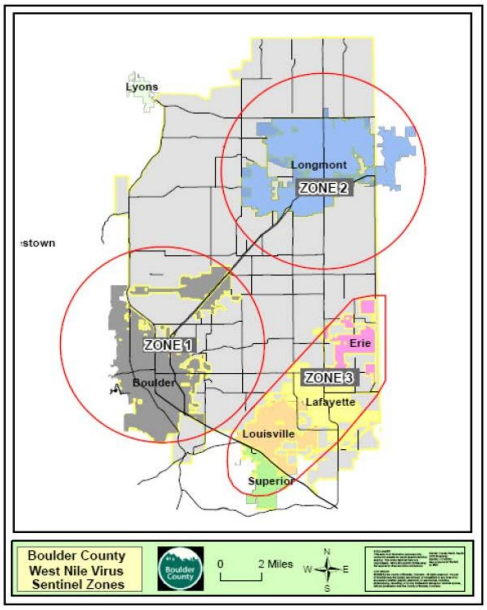
CDPHE West Nile Virus Mosquito Sample Testing Results

Many local health departments have moved towards mosquito-based surveillance indicators to assess the weekly risk of West Nile transmission and to guide response decisions for mosquito adulticiding. The vector index and infection rate is derived by testing the collected mosquitoes from CMC surveillance trapping for WNV infection. This value is closely monitored by the CDPHE and local health departments to evaluate the risk posed by the vector mosquito population. As stated on the CDPHE website, the seasonal variation of West Nile virus risk can change throughout a summer and it is best to assume you have some risk for WNV if you have mosquitoes.

As defined in the CDC guidelines for West Nile virus surveillance, prevention and control the vector index (VI) is an estimate of the number of West Nile virus infected mosquitoes in an area. This number can serve as a human health risk value. An operational value of 0.75, which was derived from comparison of historical data for human infections, as well as relative abundance and infection in mosquitoes, serves an indicator of high risk for West Nile virus transmission to humans in the corresponding area (https://www.colorado.gov/). As the value of the vector index increases there is a corresponding risk of human disease and this value can be used to offset epidemics.

In 2015, the *Culex* submitted to the CDPHE Lab for West Nile Virus testing from zones BCZ2 and BCZ3 included a total of 107 sample pools. Of those samples, we are aware of 18 samples (approx. 16 %) that tested positive. The 107 samples submitted from these two Boulder County Sentinel Zones represent approximately 5.5% of the 1946 total samples tested in Colorado during the 2015 season. West Nile virus levels this season in Boulder County and Eastern Colorado were light to moderate and likely primarily vectored by *Culex tarsalis*.

BOULDER COUNTY PUBLIC HEALTH
Environmental Health Division
3450 Broadway
Boulder, CO 80304
303.441.1564
www.bouldercountyvector.org



VECTOR INDEX			
	ZONE 1	ZONE 2	ZONE 3
Season Week	Vector Index	Vector Index	Vector Index
Week 21	-----	-----	-----
Week 22	-----	-----	-----
Week 23	0.00	0.00	0.00
Week 24	0.00	0.00	0.00
Week 25	0.00	0.00	0.00
Week 26	0.00	0.00	0.00
Week 27	0.00	0.00	0.00
Week 28	0.14	0.00	0.00
Week 29	0.00	0.00	0.00
Week 30	0.20	0.20	0.18
Week 31	0.00	0.00	0.18
Week 32	0.00	0.72	0.00
Week 33	0.00	0.20	0.00
Week 34	0.00	0.18	0.00
Week 35	-----	-----	-----
Week 36	-----	-----	-----

Making valid comparisons to previous years is somewhat compromised due to the limits placed on the number of samples that could be submitted this season due to budget cuts at the state level – we could certainly have submitted many more *Culex* during some of the peak weeks this year had funding at the state level been available to do so. As federal and state funding for testing continues to decrease each year, we may need to explore alternate methods in the future for monitoring West Nile Virus activity in Boulder County.

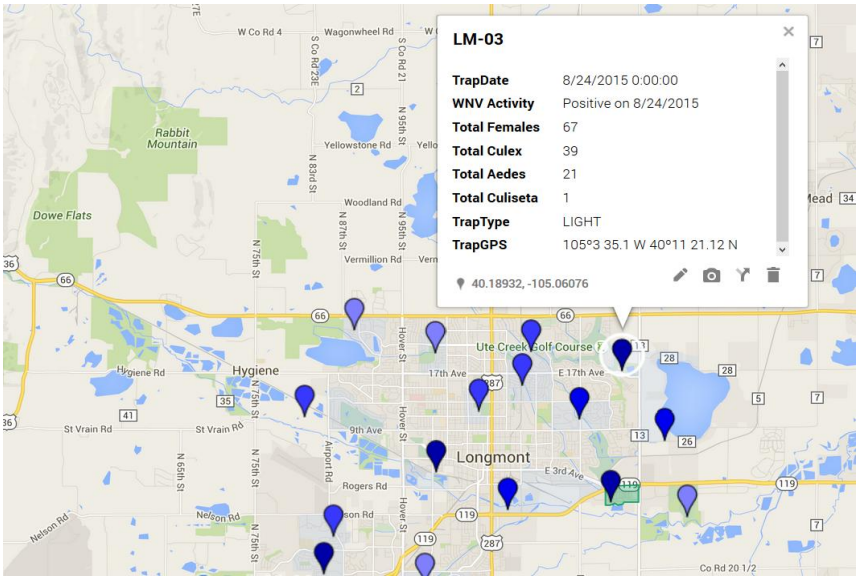
Colorado Mosquito Control

Adult Sample Pool Data

Pool	Date	County	Trap Number	Quantity	Results	Species	Trap Type	MIR	Notes
S318374	07/27/2015	Boulder	LM-42	51	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318381	07/27/2015	Boulder	LA-01	7	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318381	07/27/2015	Boulder	LA-10	2	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318381	07/27/2015	Boulder	LO-08	3	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318381	07/27/2015	Boulder	ER-05	4	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318429	08/03/2015	Boulder	ER-05	4	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318429	08/03/2015	Boulder	LA-01	5	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318429	08/03/2015	Boulder	LA-10	3	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318429	08/03/2015	Boulder	LO-08	2	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ3
S318335	08/10/2015	Boulder	LM-03	65	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318336	08/10/2015	Boulder	LM-03	65	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318337	08/10/2015	Boulder	LM-03	65	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318271	08/17/2015	Boulder	LM-28	53	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318271	08/17/2015	Boulder	LM-31	10	POSITIVE	Culex tarsalis	LIGHT	0.000	BCZ2
S318291	08/24/2015	Boulder	LM-03	7	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ2
S318291	08/24/2015	Boulder	LM-28	1	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ2
S318291	08/24/2015	Boulder	LM-31	1	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ2
S318291	08/24/2015	Boulder	LM-42	9	POSITIVE	Culex pipiens	LIGHT	0.000	BCZ2

CMMS - Comprehensive Mosquito Management System **©2015 Colorado Mosquito Control**

PLEASE VISIT CMC'S DASHBOARD FOR ONLINE ACCESS TO WEEKLY TRAP DATA & WNV LOCATIONS:
HTTP://WWW.COMOSQUITOCONTROL.COM/LONGMONT.HTML



Adult Mosquito Control

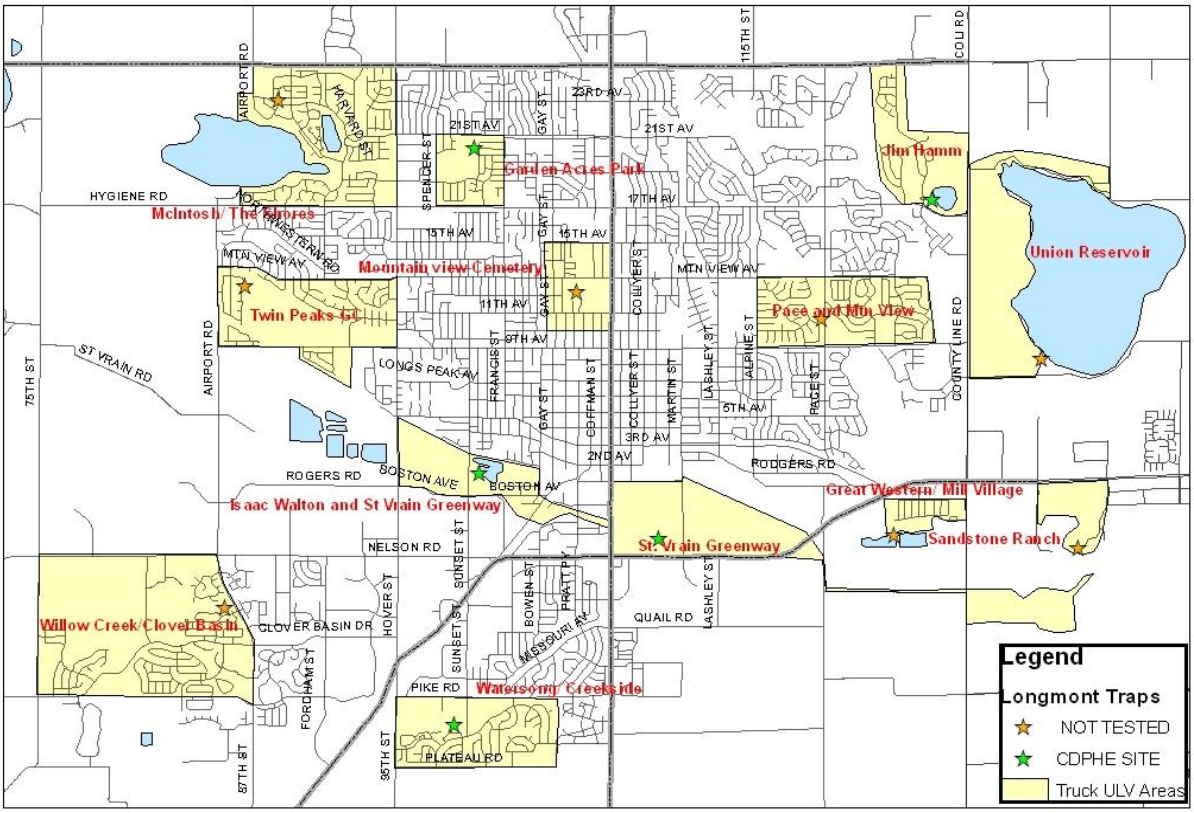
The goal of Colorado Mosquito Control is to provide all residents of our Boulder County Cooperative Programs with the best options for effective modern mosquito management. The primary emphasis of the City of Longmont Mosquito Management Program is to control mosquitoes in the larval stage, using biological control products which are target specific to larval mosquitoes. The areas surrounding mosquito traps, designated in yellow in the map below, are fogged for adult mosquitoes when mosquito traps surpass 100 mosquitoes in a given trapping night. Mosquito spraying does not occur in the City of Longmont until WNv infected mosquitoes are identified from Larimer, Boulder or Weld County during a mosquito season. The objective of this Integrated Mosquito Management approach is to manage the vector populations and minimize the number of mosquitoes that will disperse into city limits, by reducing the number of mosquitoes harboring at the periphery of city limits. This approach not only reduces the amount of adulticides applied across the city and limits the biting frequency of mosquitoes in more densely populated parts of the city, but also complements larval mosquito control measures by preventing new vector mosquitoes from being produced with oviposition of eggs at larval sites.

CMC worked with the Daily Times Call and the Public Information Officer at the City Manager's Office again in 2015 to provide resident notification of mosquito adulticide applications via the local newspaper and the city's website. CMC utilized mosquito trapping data collected on Sunday evenings each week, for reporting to the City of Longmont on Mondays. The City of Longmont would make decisions, based on mosquito trap counts, as to the areas to be included in mosquito spraying for that week. CMC communicated the areas to the Daily Times Call for posting in the newspaper on Tuesdays. CMC additionally posted the spray schedules for the City of Longmont on CMC's website on Mondays, which remained posted through Thursday, the day of applications. All adult mosquito applications within the City of Longmont were scheduled and completed on Thursday evenings, which allowed residents 48 hrs. notification following the posting in the Times Call.

In 2015 CMC utilized the water-based product AquaLuer 20-20 for all adult mosquito control operations that took place within the City of Longmont. Colorado Mosquito Control completed spray missions in 52 designated zones and drove 351 miles including adulticide applications on 277.4 miles of roads, alleyways and trails within the City of Longmont.

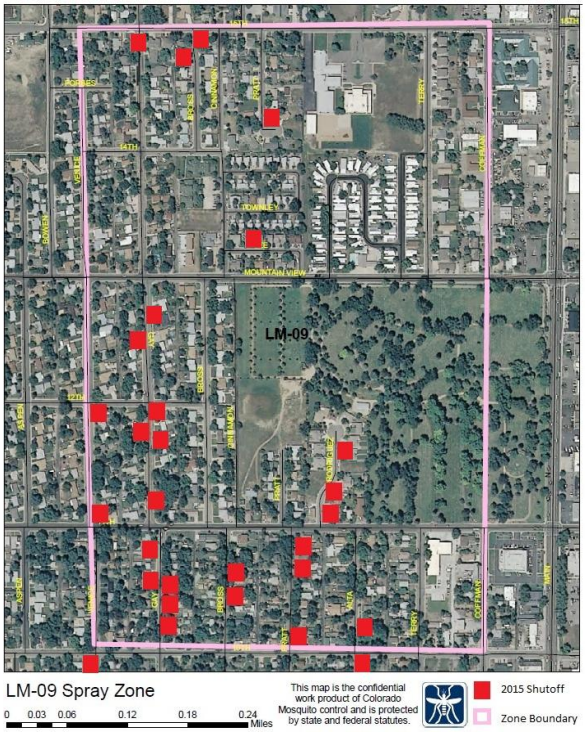
CMC uses state of the art technology, calibrated application timing, and least-toxic products to minimize non-target impacts. All adult mosquito control is accomplished using Ultra Low Volume (ULV) fogging equipment and is performed after dusk when the majority of mosquito species are most active. This type of equipment produces droplets averaging 12 microns in diameter and allows for a minimal amount of product to be put into the environment. These treatments take place in the evening when mosquitoes are flying in greater numbers and non-target insect activity (for example, day-flying pollinators like bees) is greatly reduced. Using this application technique, the overall goal of minimal environmental impact and effective adult control is achieved in the targeted area.

2015 SPRAY ZONES FOR THE CITY OF LONGMONT



MOUNTAIN VIEW CEMETERY - (LM-09)

In 2015 we received quite a few calls from individuals within the Mountain View Cemetery area in response to a letter sent out by a concerned resident. We currently have 29 shutoff requests mapped in this zone with the vast majority of these being in the South Eastern portion. Shutoff densities of this magnitude can render adult mosquito control applications ineffective and because of that our efforts were primarily focused within the cemetery and in the northern half of the zone.



Public Relations and Education

CMC is dedicated to providing strong Public Outreach and Education Programs to residents in all of our communities. Citizen complaints, inquiry, information and satisfaction surveys can aid in evaluating the effectiveness of a program. CMC constantly looks for ways to better serve the communities we work with and encourages both the citizen and local media involvement in order to increase the effectiveness of our programs. We have clearly demonstrated that commitment and belief by proactively serving the City of Longmont (and all of our contracted communities) with numerous innovative programs, activities and services.

Customer service is always a high priority for CMC. We take pride in training each and every technician so that they have the knowledge to provide residents with the correct answers to their questions. Each field technician spends part of their day responding to resident concerns in their work area. This in-field customer service personalizes the mosquito control program, provides CMC with local information on mosquito activity and presents a valuable opportunity to educate our residents about mosquito biology and control.

MosquitoLine™

CMC maintains a toll-free telephone line: (877) 276-4306 and local lines at 970-962-2582 and 970-663-5697 (at no cost to the customer) to accept calls from the public concerning:

- Information about mosquito biology and source reduction of mosquito habitats
- Information on program components, operations, and monitoring
- Seasonal West Nile virus activity
- Personal protection options for mosquito annoyances and West Nile virus risk
- Reports about mosquitoes and possible larval mosquito habitats
- Opt-out of any adulticide spraying via a shut-off list and site inspection
- Request notification when adulticide spraying is planned in their neighborhood
- Request health and safety information about mosquito control operations and pesticide products used

CMC has provided Mosquito Hotlines to the residents in communities which we are contracted to also reduce workload by municipal personnel. This enables direct communication and response by mosquito control employees to resident's concerns about West Nile virus and larval site activity and treatment. CMC maintains a log of calls received and summarizes these calls in both monthly and annual reports.

IN 2015 CMC received 86 phone calls from City of Longmont residents. Of these 6 were mosquito annoyance reports, 56 were requests to be added to the call notification and/or shutoff program, 16 were information requests, 6 were new larval site reports, 1 was an individual requesting to be removed from the shutoff program and 1 was from a bee keeper making sure we knew the location of her hives.

CALL NOTIFICATION & SHUTOFF SYSTEM

CMC maintained its comprehensive Call Notification & Shutoff database in 2015 and notified residents' on the list when conducting ULV adulticide spray applications within 2 blocks of their property or within the effective ULV spray drift distance (300-500 ft. depending on wind speed and direction). All Shutoff locations are mapped in ArcView GIS. Call & Shutoff forms are available online and may be submitted by mail.

As of 2015 there are 319 residents of Longmont on the Call, Email Notification & Shutoff Program. Of these residents 226 are involved in the shutoff program and 93 simply want to be notified. As of 2014, there were 278 residents of Longmont on the Call, Email Notification & Shutoff Program.

FLOATER TRAP PLACEMENT for annoyance reports at resident homes at locations away from standard trapping zones.

DAILY POSTING OF ULV SPRAY ZONES posted by 3 pm for resident notification

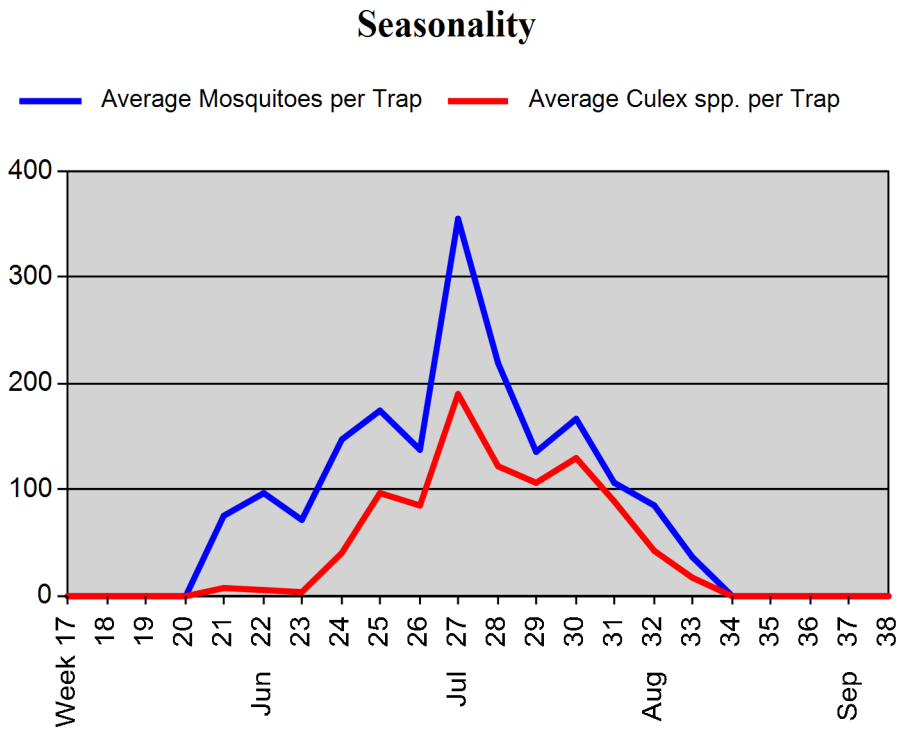
http://www.comosquitocontrol.com/SpraySchedules.html

2015 Longmont Light Trap Composite Data

Total number of trap/nights set:	206
Total number of mosquitoes collected:	28,871
Average mosquitoes per trap/night:	140
Average Culex per trap/night:	72

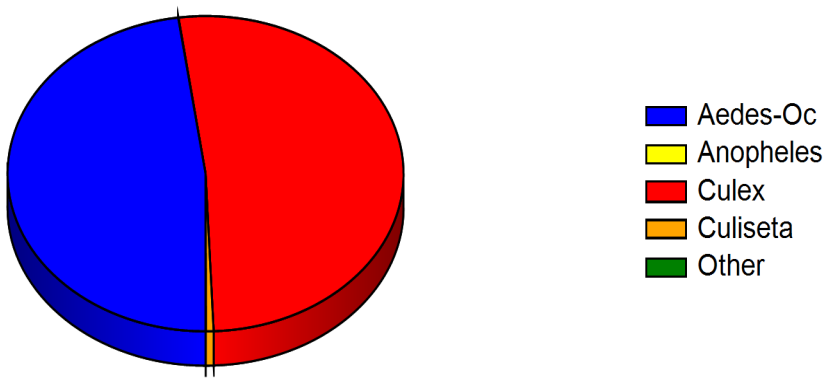
Species collected and abundance:

Aedes (Oc.) dorsalis	1186	4.1 %
Aedes (Oc.) hendersoni	31	0.1 %
Aedes (Oc.) increpitus	2607	9.0 %
Aedes (Oc.) melanimon	45	0.2 %
Aedes (Oc.) nigromaculis	22	0.1 %
Aedes (Oc.) trivittatus	249	0.9 %
Aedes cinereus	2	0.0 %
Aedes vexans	9655	33.4 %
Anopheles earlei	1	0.0 %
Anopheles hermsi	6	0.0 %
Coquillettidia perturbans	4	0.0 %
Culex pipiens	293	1.0 %
Culex salinarius	157	0.5 %
Culex tarsalis	14429	50.0 %
Culiseta inornata	184	0.6 %



Genus proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	13,797	47.8 %
Anopheles	7	0.0 %
Culex	14,879	51.5 %
Culiseta	184	0.6 %
Other	4	0.0 %



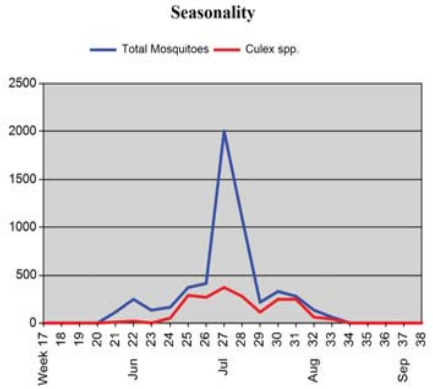
LM-03: Jim Hamm Nature Area

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Longmont 17th Ave. at Sundance Rd.
GPS: N40° 11.350, W105° 3.585'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 5,564
Average mosquitoes per trap/night: 428
Average Culex per trap/night: 153

Species collected and abundance:

Aedes (Oc.) dorsalis	702	12.6 %
Aedes (Oc.) increpitus	2	0.0 %
Aedes (Oc.) melanimon	21	0.4 %
Aedes (Oc.) nigromaculis	10	0.2 %
Aedes (Oc.) trivittatus	12	0.2 %
Aedes vexans	2792	50.2 %
Culex pipiens	25	0.4 %
Culex salinarius	10	0.2 %
Culex tarsalis	1956	35.2 %
Culiseta inornata	34	0.6 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	3,539	63.6 %
Anopheles	0	0.0 %
Culex	1,991	35.8 %
Culiseta	34	0.6 %
Other	0	0.0 %

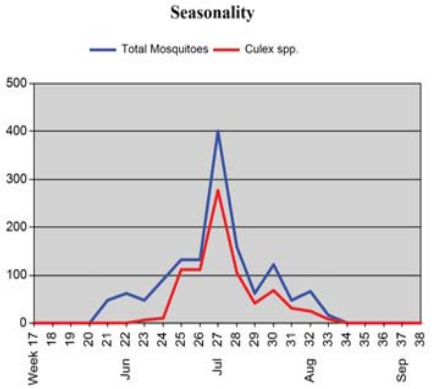
LM-09: Mountain View Cemetery

Season: 2015
Trap Type: Light/CO2
Location: Main St. at 11th Ave. - Mountain View Cemetery
GPS: N40° 10.750', W105° 6.355'

Total number of trap/nights set: 12
Total number of mosquitoes collected: 1,254
Average mosquitoes per trap/night: 104
Average Culex per trap/night: 57

Species collected and abundance:

Aedes (Oc.) dorsalis	6	0.5 %
Aedes (Oc.) hendersoni	23	1.8 %
Aedes (Oc.) increpitus	3	0.2 %
Aedes (Oc.) melanimon	2	0.2 %
Aedes (Oc.) nigromaculis	2	0.2 %
Aedes (Oc.) trivittatus	27	2.2 %
Aedes vexans	490	39.1 %
Culex pipiens	17	1.4 %
Culex salinarius	13	1.0 %
Culex tarsalis	658	52.5 %
Culiseta inornata	13	1.0 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	553	44.1 %
Anopheles	0	0.0 %
Culex	688	54.9 %
Culiseta	13	1.0 %
Other	0	0.0 %

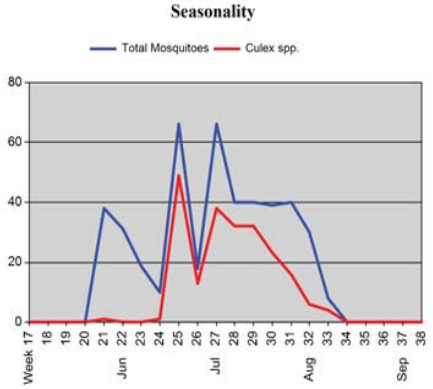
LM-10: Garden Acres Park

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Spencer St. at 18th Ave - east side of park
GPS: N40° 11.640', W105° 7.240'

Total number of trap/nights set: 12
Total number of mosquitoes collected: 405
Average mosquitoes per trap/night: 34
Average Culex per trap/night: 15

Species collected and abundance:

Aedes (Oc.) dorsalis	24	5.9 %
Aedes (Oc.) nigromaculis	4	1.0 %
Aedes (Oc.) trivittatus	4	1.0 %
Aedes vexans	188	46.4 %
Culex pipiens	7	1.7 %
Culex salinarius	4	1.0 %
Culex tarsalis	172	42.5 %
Culiseta inornata	2	0.5 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	220	54.3 %
Anopheles	0	0.0 %
Culex	183	45.2 %
Culiseta	2	0.5 %
Other	0	0.0 %

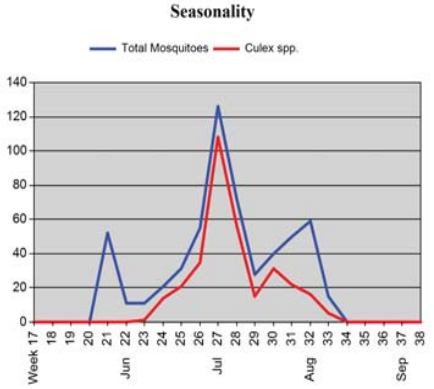
LM-17: The Shores-Concord Way

Season: 2015
Trap Type: Light/CO2
Location: between 3113 & 3117 Concord Way
GPS: N40° 11.970' W105° 8.780'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 571
Average mosquitoes per trap/night: 44
Average Culex per trap/night: 25

Species collected and abundance:

Aedes (Oc.) dorsalis	29	5.1 %
Aedes (Oc.) nigromaculis	1	0.2 %
Aedes (Oc.) trivittatus	24	4.2 %
Aedes vexans	192	33.6 %
Culex pipiens	2	0.4 %
Culex tarsalis	322	56.4 %
Culiseta inornata	1	0.2 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	246	43.1 %
Anopheles	0	0.0 %
Culex	324	56.7 %
Culiseta	1	0.2 %
Other	0	0.0 %

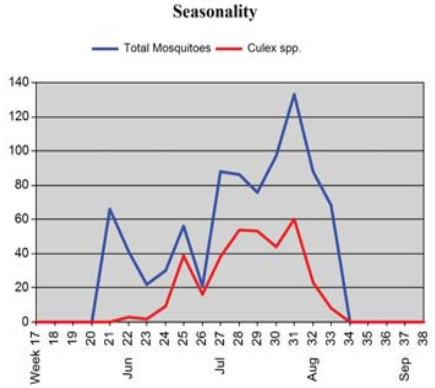
LM-18: Twin Peaks Circle

Season: 2015
Trap Type: Light/CO2
Location: 3631 Mountain View Ct., Longmont
GPS: N40° 10.890', W105° 9.040'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 872
Average mosquitoes per trap/night: 67
Average Culex per trap/night: 27

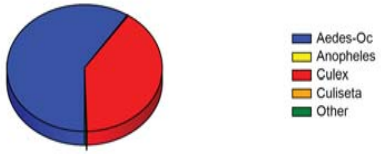
Species collected and abundance:

Aedes (Oc.) dorsalis	29	3.3 %
Aedes (Oc.) melanimon	1	0.1 %
Aedes (Oc.) nigromaculis	1	0.1 %
Aedes (Oc.) trivittatus	55	6.3 %
Aedes vexans	431	49.4 %
Anopheles hermsi	2	0.2 %
Coquillettidia perturbans	3	0.3 %
Culex pipiens	10	1.1 %
Culex salinarius	3	0.3 %
Culex tarsalis	336	38.5 %
Culiseta inornata	1	0.1 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	517	59.3 %
Anopheles	2	0.2 %
Culex	349	40.0 %
Culiseta	1	0.1 %
Other	3	0.3 %



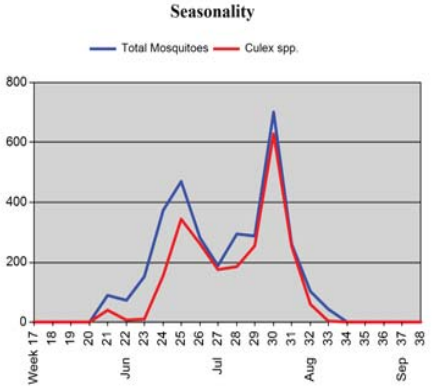
LM-22: Sandstone Ranch

Season: 2015
Trap Type: Light/CO2
Location: Longmont at Sandstone Ranch District Park
GPS: N40° 9.200', W105° 2.430'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 3,312
Average mosquitoes per trap/night: 255
Average Culex per trap/night: 182

Species collected and abundance:

Aedes (Oc.) dorsalis	18	0.5 %
Aedes (Oc.) increpitus	156	4.7 %
Aedes (Oc.) melanimon	1	0.0 %
Aedes (Oc.) trivittatus	8	0.2 %
Aedes vexans	732	22.1 %
Anopheles hermsi	1	0.0 %
Culex pipiens	10	0.3 %
Culex salinarius	8	0.2 %
Culex tarsalis	2353	71.0 %
Culiseta inornata	25	0.8 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	915	27.6 %
Anopheles	1	0.0 %
Culex	2,371	71.6 %
Culiseta	25	0.8 %
Other	0	0.0 %

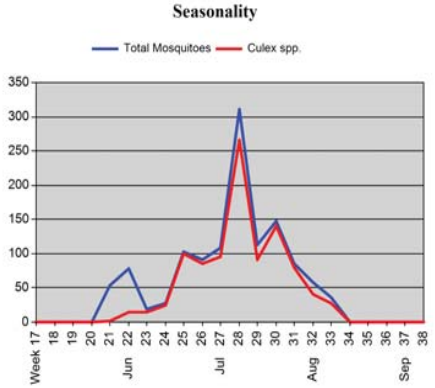
LM-23: Longmont Union Reservoir

Season: 2015
Trap Type: Light/CO2
Location: near entrance station at Union Reservoir
GPS: N40° 10.340, W105° 2.705'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,230
Average mosquitoes per trap/night: 95
Average Culex per trap/night: 74

Species collected and abundance:

Aedes (Oc.) dorsalis	63	5.1 %
Aedes (Oc.) increpitus	8	0.7 %
Aedes (Oc.) melanimon	3	0.2 %
Aedes (Oc.) nigromaculis	1	0.1 %
Aedes (Oc.) trivittatus	6	0.5 %
Aedes vexans	183	14.9 %
Culex pipiens	10	0.8 %
Culex salinarius	9	0.7 %
Culex tarsalis	947	77.0 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	264	21.5 %
Anopheles	0	0.0 %
Culex	966	78.5 %
Culiseta	0	0.0 %
Other	0	0.0 %

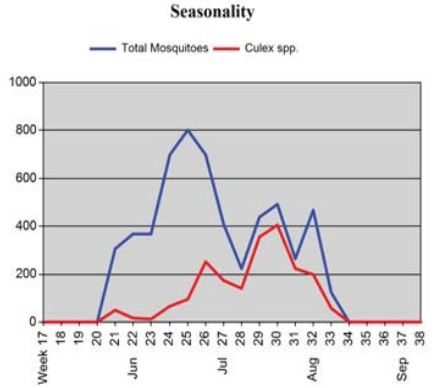
LM-27: Great Western/Mill Village

Season: 2015
Trap Type: Light/CO2
Location: south of Great Western Dr. at 3rd Ave.
GPS: 40° 9.290', W105° 3.895'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 5,654
Average mosquitoes per trap/night: 435
Average Culex per trap/night: 157

Species collected and abundance:

Aedes (Oc.) dorsalis	21	0.4 %
Aedes (Oc.) increpitus	2376	42.0 %
Aedes (Oc.) melanimon	4	0.1 %
Aedes (Oc.) trivittatus	13	0.2 %
Aedes vexans	1160	20.5 %
Culex pipiens	42	0.7 %
Culex salinarius	44	0.8 %
Culex tarsalis	1960	34.7 %
Culiseta inornata	34	0.6 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	3,574	63.2 %
Anopheles	0	0.0 %
Culex	2,046	36.2 %
Culiseta	34	0.6 %
Other	0	0.0 %

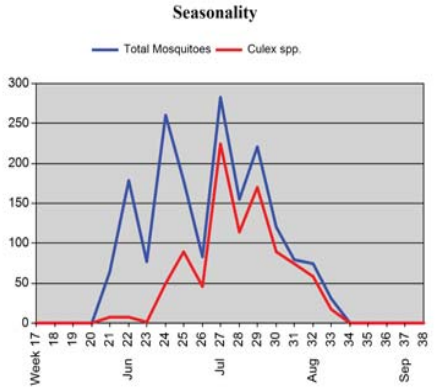
LM-28: St. Vrain Greenway at Emery St.

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: along St. Vrain Greenway west of Martin St.
GPS: N40° 9.285', W105° 5.810'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,802
Average mosquitoes per trap/night: 139
Average Culex per trap/night: 73

Species collected and abundance:

Aedes (Oc.) dorsalis	15	0.8 %
Aedes (Oc.) hendersoni	3	0.2 %
Aedes (Oc.) increpitus	37	2.1 %
Aedes (Oc.) trivittatus	2	0.1 %
Aedes vexans	784	43.5 %
Culex pipiens	22	1.2 %
Culex salinarius	16	0.9 %
Culex tarsalis	909	50.4 %
Culiseta inornata	14	0.8 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	841	46.7 %
Anopheles	0	0.0 %
Culex	947	52.6 %
Culiseta	14	0.8 %
Other	0	0.0 %

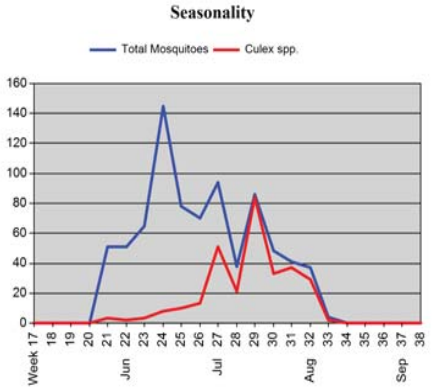
LM-31: Left Hand Creek at Creekside

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Left Hand Creek south of Sunset St. & Pike Rd
GPS: N40° 8.115', W105° 7.375'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 808
Average mosquitoes per trap/night: 62
Average Culex per trap/night: 23

Species collected and abundance:

Aedes (Oc.) dorsalis	38	4.7 %
Aedes (Oc.) hendersoni	2	0.2 %
Aedes (Oc.) increpitus	2	0.2 %
Aedes (Oc.) melanimon	2	0.2 %
Aedes (Oc.) trivittatus	37	4.6 %
Aedes vexans	427	52.8 %
Culex pipiens	9	1.1 %
Culex salinarius	2	0.2 %
Culex tarsalis	285	35.3 %
Culiseta inornata	4	0.5 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	508	62.9 %
Anopheles	0	0.0 %
Culex	296	36.6 %
Culiseta	4	0.5 %
Other	0	0.0 %

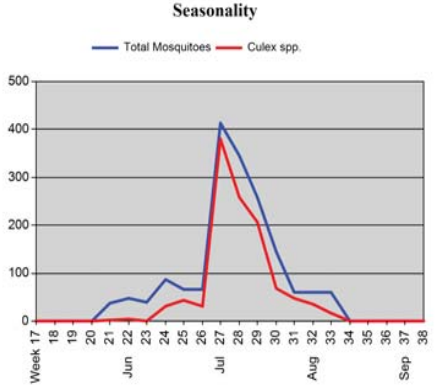
LM-34: Longmont Meadow View

Season: 2015
Trap Type: Light/CO2
Location: Dry Creek Greenway west of Airport Road
GPS: N40° 8.830', W105° 9.210'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,685
Average mosquitoes per trap/night: 130
Average Culex per trap/night: 87

Species collected and abundance:

Aedes (Oc.) dorsalis	20	1.2 %
Aedes (Oc.) increpitus	3	0.2 %
Aedes (Oc.) melanimon	1	0.1 %
Aedes (Oc.) nigromaculis	1	0.1 %
Aedes (Oc.) trivittatus	19	1.1 %
Aedes vexans	509	30.2 %
Coquillettidia perturbans	1	0.1 %
Culex pipiens	6	0.4 %
Culex salinarius	2	0.1 %
Culex tarsalis	1121	66.5 %
Culiseta inornata	2	0.1 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	553	32.8 %
Anopheles	0	0.0 %
Culex	1,129	67.0 %
Culiseta	2	0.1 %
Other	1	0.1 %

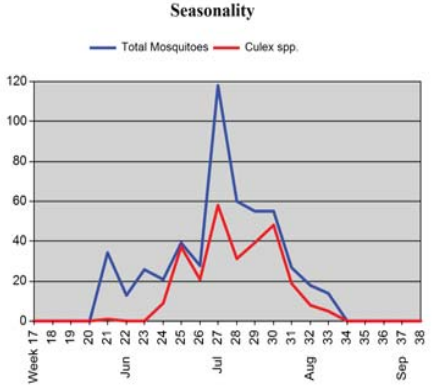
LM-40: Liberty Court

Season: 2015
Trap Type: Light/CO2
Location: Liberty Court north of 15th Ave.
GPS: N40° 11.180', W105° 5.555'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 508
Average mosquitoes per trap/night: 39
Average Culex per trap/night: 21

Species collected and abundance:

Aedes (Oc.) dorsalis	9	1.8 %
Aedes (Oc.) hendersoni	3	0.6 %
Aedes (Oc.) increpitus	3	0.6 %
Aedes (Oc.) melanimon	1	0.2 %
Aedes vexans	213	41.9 %
Culex pipiens	21	4.1 %
Culex salinarius	7	1.4 %
Culex tarsalis	248	48.8 %
Culiseta inornata	3	0.6 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	229	45.1 %
Anopheles	0	0.0 %
Culex	276	54.3 %
Culiseta	3	0.6 %
Other	0	0.0 %

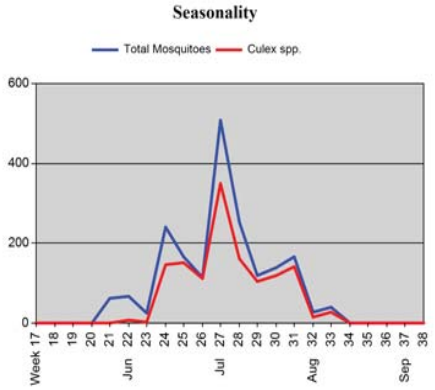
LM-41: Stoney Ridge/Alpine Elementary

Season: 2015
Trap Type: Light/CO2
Location: Lashley St. NE of Sunlight Dr.
GPS: N40° 11.655', W105° 5.365'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,929
Average mosquitoes per trap/night: 148
Average Culex per trap/night: 103

Species collected and abundance:

Aedes (Oc.) dorsalis	18	0.9 %
Aedes (Oc.) increpitus	3	0.2 %
Aedes (Oc.) melanimon	3	0.2 %
Aedes (Oc.) trivittatus	6	0.3 %
Aedes vexans	549	28.5 %
Culex pipiens	27	1.4 %
Culex salinarius	13	0.7 %
Culex tarsalis	1295	67.1 %
Culiseta inornata	15	0.8 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	579	30.0 %
Anopheles	0	0.0 %
Culex	1,335	69.2 %
Culiseta	15	0.8 %
Other	0	0.0 %

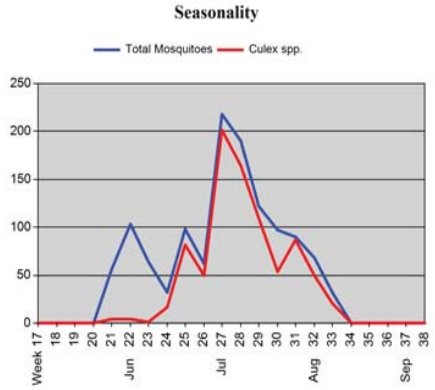
LM-42: Izaak Walton Park

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Sunset St. at St. Vrain River
GPS: N40° 9.765', W105° 7.215'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,232
Average mosquitoes per trap/night: 95
Average Culex per trap/night: 65

Species collected and abundance:

Aedes (Oc.) dorsalis	24	1.9 %
Aedes (Oc.) increpitus	5	0.4 %
Aedes (Oc.) melanimon	3	0.2 %
Aedes (Oc.) trivittatus	7	0.6 %
Aedes cinereus	2	0.2 %
Aedes vexans	324	26.3 %
Anopheles earlei	1	0.1 %
Anopheles hermsi	3	0.2 %
Culex pipiens	49	4.0 %
Culex salinarius	15	1.2 %
Culex tarsalis	781	63.4 %
Culiseta inornata	18	1.5 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	365	29.6 %
Anopheles	4	0.3 %
Culex	845	68.6 %
Culiseta	18	1.5 %
Other	0	0.0 %

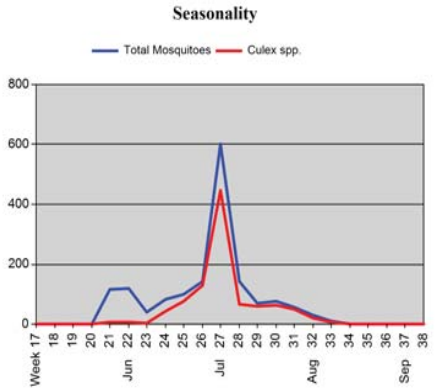
LM-43: Rough & Ready South

Season: 2015
Trap Type: Light/CO2
Location: Rough and Ready Trail at Pace St.
GPS: N40° 10.630', W105° 4.505'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 1,582
Average mosquitoes per trap/night: 122
Average Culex per trap/night: 75

Species collected and abundance:

Aedes (Oc.) dorsalis	147	9.3 %
Aedes (Oc.) increpitus	9	0.6 %
Aedes (Oc.) melanimon	3	0.2 %
Aedes (Oc.) nigromaculis	1	0.1 %
Aedes vexans	433	27.4 %
Culex pipiens	31	2.0 %
Culex salinarius	8	0.5 %
Culex tarsalis	934	59.0 %
Culiseta inornata	16	1.0 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	593	37.5 %
Anopheles	0	0.0 %
Culex	973	61.5 %
Culiseta	16	1.0 %
Other	0	0.0 %

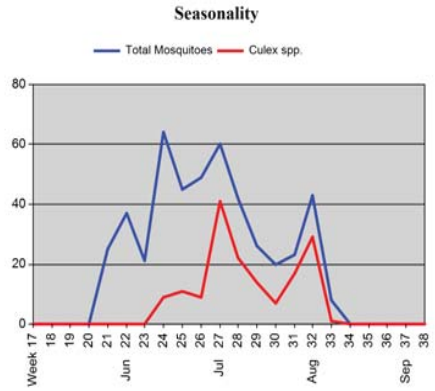
LM-44: Reserve at Somerset Meadows

Season: 2015
Trap Type: Light/CO2
Location: retention pond at Frederick Circle
GPS: N40° 8.230', W105° 9.375'

Total number of trap/nights set: 13
Total number of mosquitoes collected: 463
Average mosquitoes per trap/night: 36
Average Culex per trap/night: 12

Species collected and abundance:

Aedes (Oc.) dorsalis	23	5.0 %
Aedes (Oc.) nigromaculis	1	0.2 %
Aedes (Oc.) trivittatus	29	6.3 %
Aedes vexans	248	53.6 %
Culex pipiens	5	1.1 %
Culex salinarius	3	0.6 %
Culex tarsalis	152	32.8 %
Culiseta inornata	2	0.4 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	301	65.0 %
Anopheles	0	0.0 %
Culex	160	34.6 %
Culiseta	2	0.4 %
Other	0	0.0 %

2015 BCZ2 Sentinel Zone Trap Composite Data

Total number of trap/nights set: 64

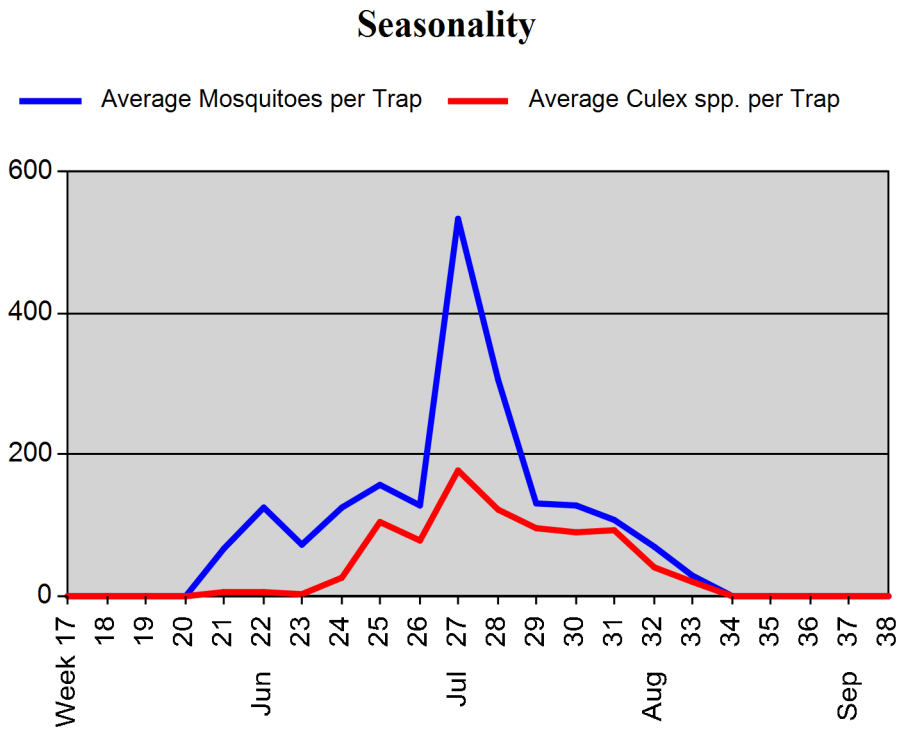
Total number of mosquitoes collected: 9,811

Average mosquitoes per trap/night: 153

Average Culex per trap/night: 67

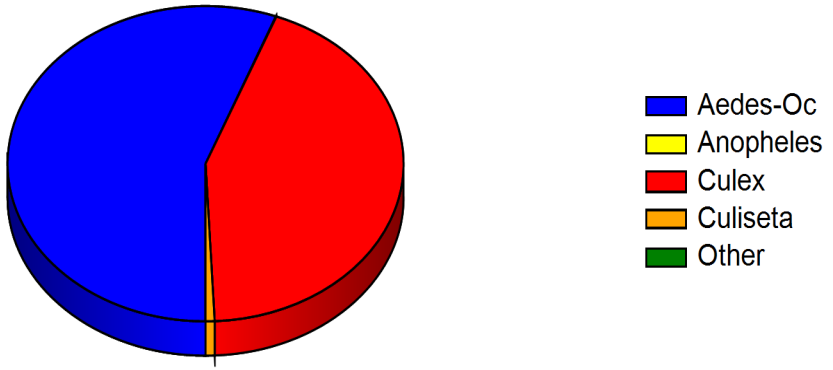
Species collected and abundance:

Aedes (Oc.) dorsalis	803	8.2 %
Aedes (Oc.) hendersoni	5	0.1 %
Aedes (Oc.) increpitus	46	0.5 %
Aedes (Oc.) melanimon	26	0.3 %
Aedes (Oc.) nigromaculis	14	0.1 %
Aedes (Oc.) trivittatus	62	0.6 %
Aedes cinereus	2	0.0 %
Aedes vexans	4515	46.0 %
Anopheles earlei	1	0.0 %
Anopheles hermsi	3	0.0 %
Culex pipiens	112	1.1 %
Culex salinarius	47	0.5 %
Culex tarsalis	4103	41.8 %
Culiseta inornata	72	0.7 %



Genus proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	5,473	55.8 %
Anopheles	4	0.0 %
Culex	4,262	43.4 %
Culiseta	72	0.7 %
Other	0	0.0 %



LM-03: Jim Hamm Nature Area

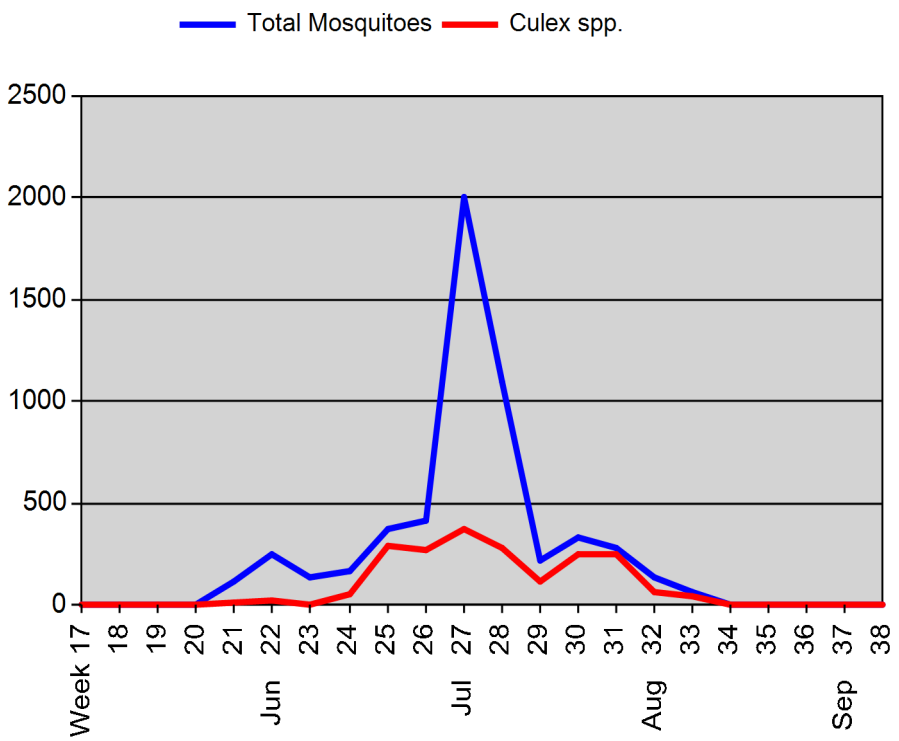
Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Longmont 17th Ave. at Sundance Rd.
GPS: N40° 11.350, W105° 3.585'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	5,564
Average mosquitoes per trap/night:	428
Average Culex per trap/night:	153

Species collected and abundance:

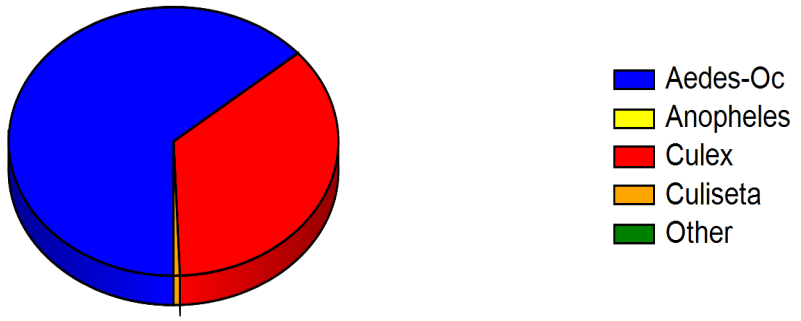
Aedes (Oc.) dorsalis	702	12.6 %
Aedes (Oc.) increpitus	2	0.0 %
Aedes (Oc.) melanimon	21	0.4 %
Aedes (Oc.) nigromaculis	10	0.2 %
Aedes (Oc.) trivittatus	12	0.2 %
Aedes vexans	2792	50.2 %
Culex pipiens	25	0.4 %
Culex salinarius	10	0.2 %
Culex tarsalis	1956	35.2 %
Culiseta inornata	34	0.6 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	3,539	63.6 %
Anopheles	0	0.0 %
Culex	1,991	35.8 %
Culiseta	34	0.6 %
Other	0	0.0 %



LM-10: Garden Acres Park

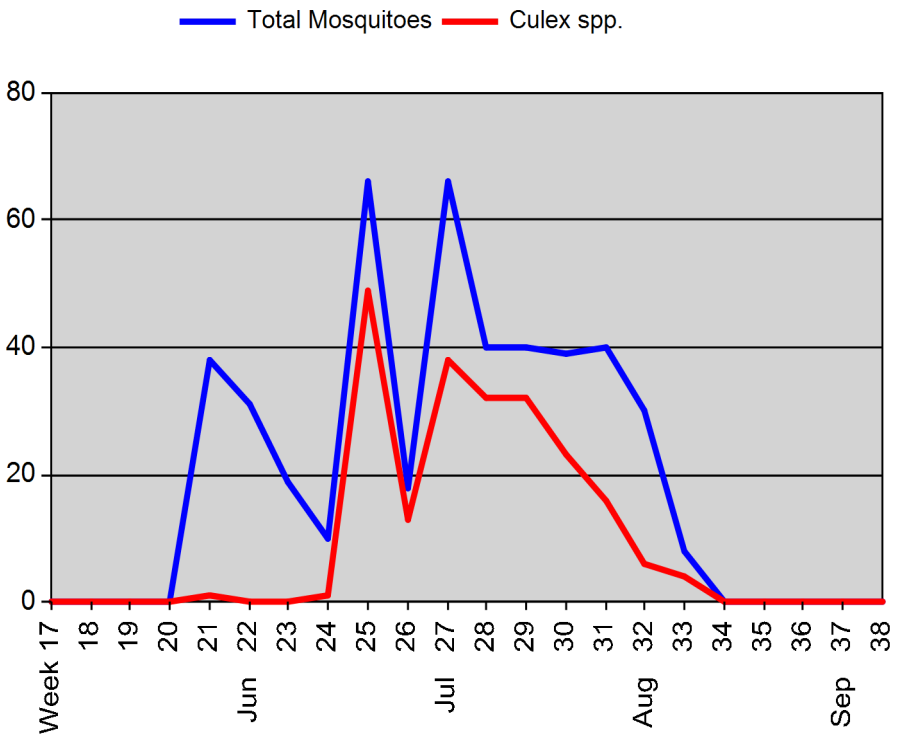
Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Spencer St. at 18th Ave - east side of park
GPS: N40° 11.640', W105° 7.240'

Total number of trap/nights set:	12
Total number of mosquitoes collected:	405
Average mosquitoes per trap/night:	34
Average Culex per trap/night:	15

Species collected and abundance:

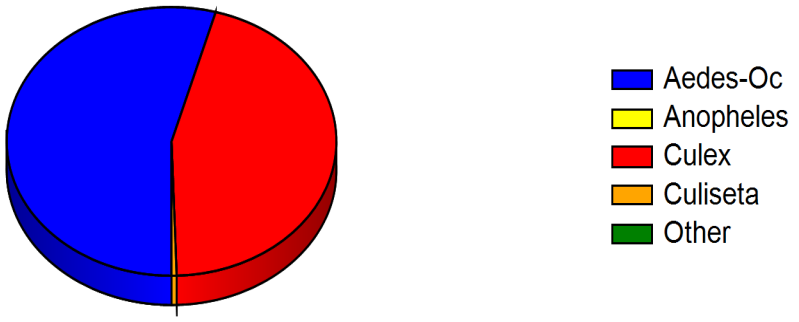
Aedes (Oc.) dorsalis	24	5.9 %
Aedes (Oc.) nigromaculis	4	1.0 %
Aedes (Oc.) trivittatus	4	1.0 %
Aedes vexans	188	46.4 %
Culex pipiens	7	1.7 %
Culex salinarius	4	1.0 %
Culex tarsalis	172	42.5 %
Culiseta inornata	2	0.5 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	220	54.3 %
Anopheles	0	0.0 %
Culex	183	45.2 %
Culiseta	2	0.5 %
Other	0	0.0 %



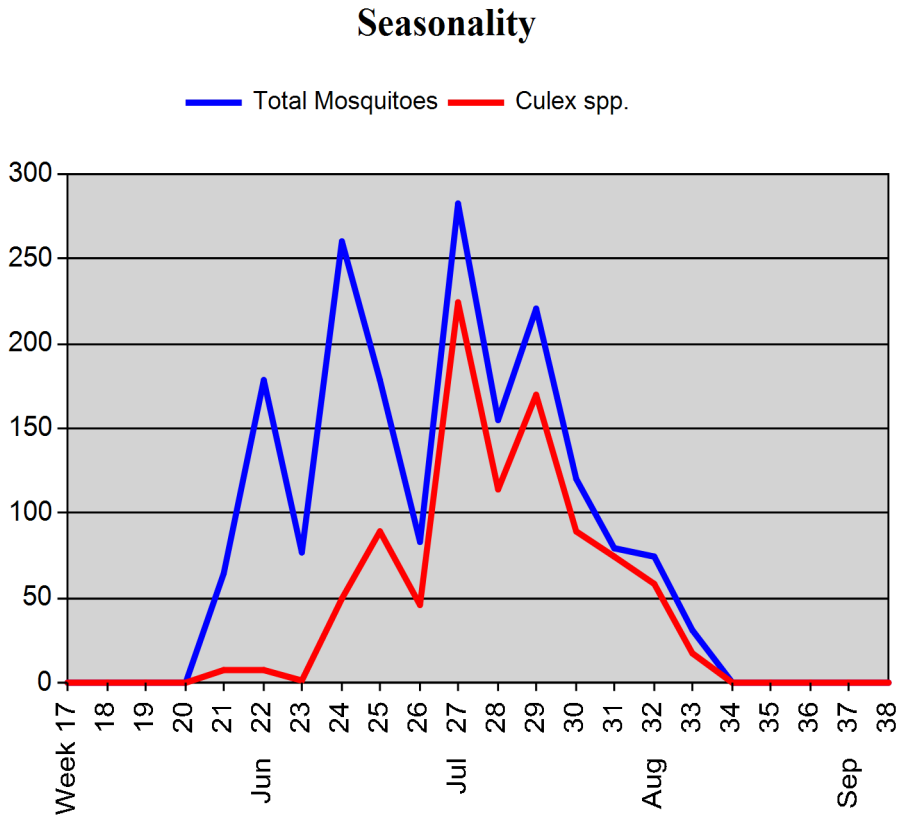
LM-28: St. Vrain Greenway at Emery St.

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: along St. Vrain Greenway west of Martin St.
GPS: N40° 9.285', W105° 5.810'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	1,802
Average mosquitoes per trap/night:	139
Average Culex per trap/night:	73

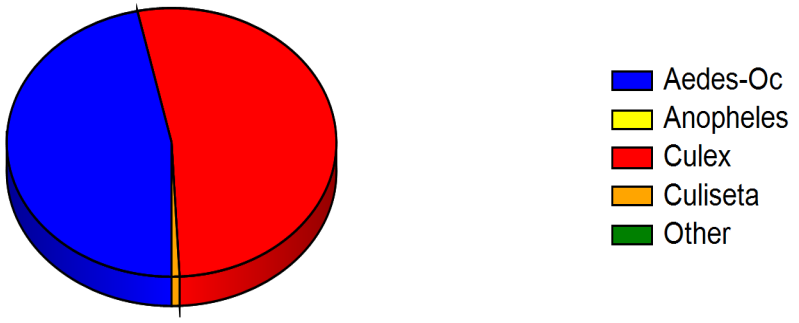
Species collected and abundance:

Aedes (Oc.) dorsalis	15	0.8 %
Aedes (Oc.) hendersoni	3	0.2 %
Aedes (Oc.) increpitus	37	2.1 %
Aedes (Oc.) trivittatus	2	0.1 %
Aedes vexans	784	43.5 %
Culex pipiens	22	1.2 %
Culex salinarius	16	0.9 %
Culex tarsalis	909	50.4 %
Culiseta inornata	14	0.8 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	841	46.7 %
Anopheles	0	0.0 %
Culex	947	52.6 %
Culiseta	14	0.8 %
Other	0	0.0 %



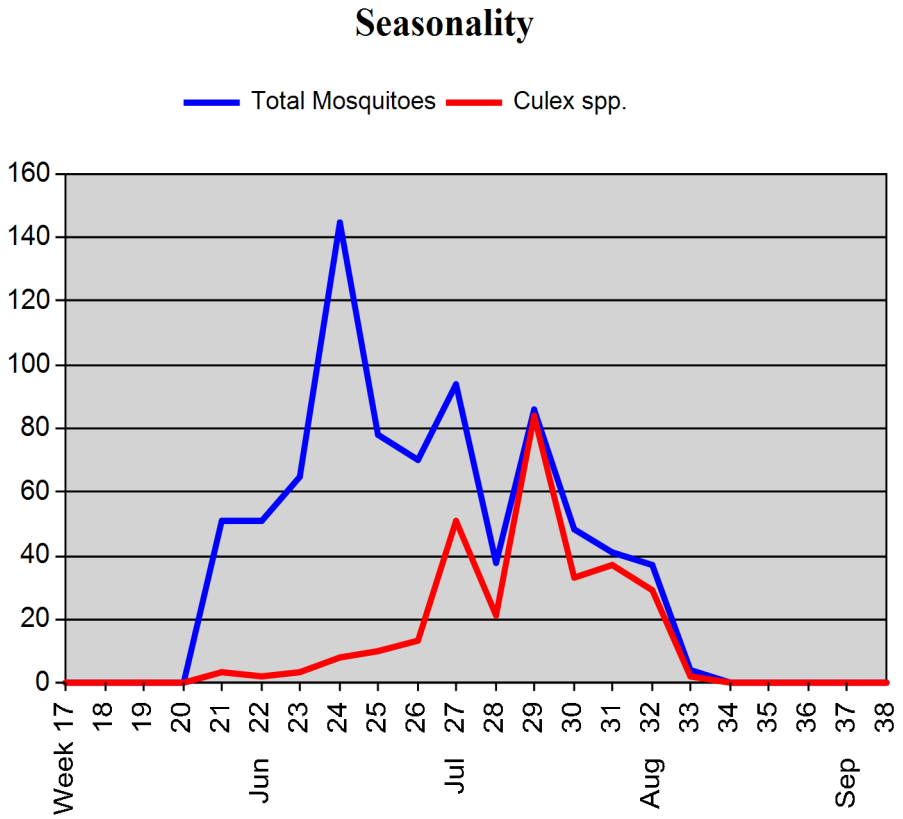
LM-31: Left Hand Creek at Creekside

Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Left Hand Creek south of Sunset St. & Pike Rd
GPS: N40° 8.115', W105° 7.375'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	808
Average mosquitoes per trap/night:	62
Average Culex per trap/night:	23

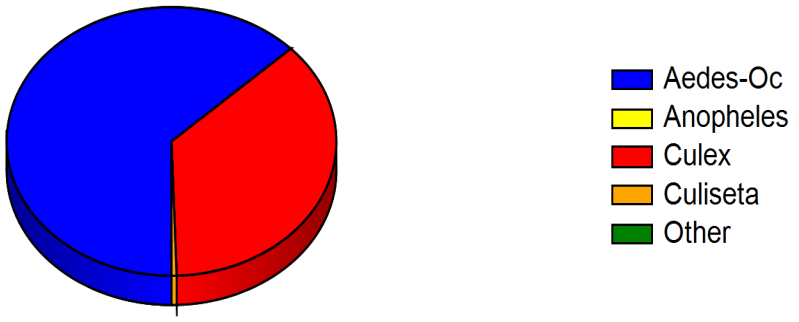
Species collected and abundance:

Aedes (Oc.) dorsalis	38	4.7 %
Aedes (Oc.) hendersoni	2	0.2 %
Aedes (Oc.) increpitus	2	0.2 %
Aedes (Oc.) melanimon	2	0.2 %
Aedes (Oc.) trivittatus	37	4.6 %
Aedes vexans	427	52.8 %
Culex pipiens	9	1.1 %
Culex salinarius	2	0.2 %
Culex tarsalis	285	35.3 %
Culiseta inornata	4	0.5 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	508	62.9 %
Anopheles	0	0.0 %
Culex	296	36.6 %
Culiseta	4	0.5 %
Other	0	0.0 %



LM-42: Izaak Walton Park

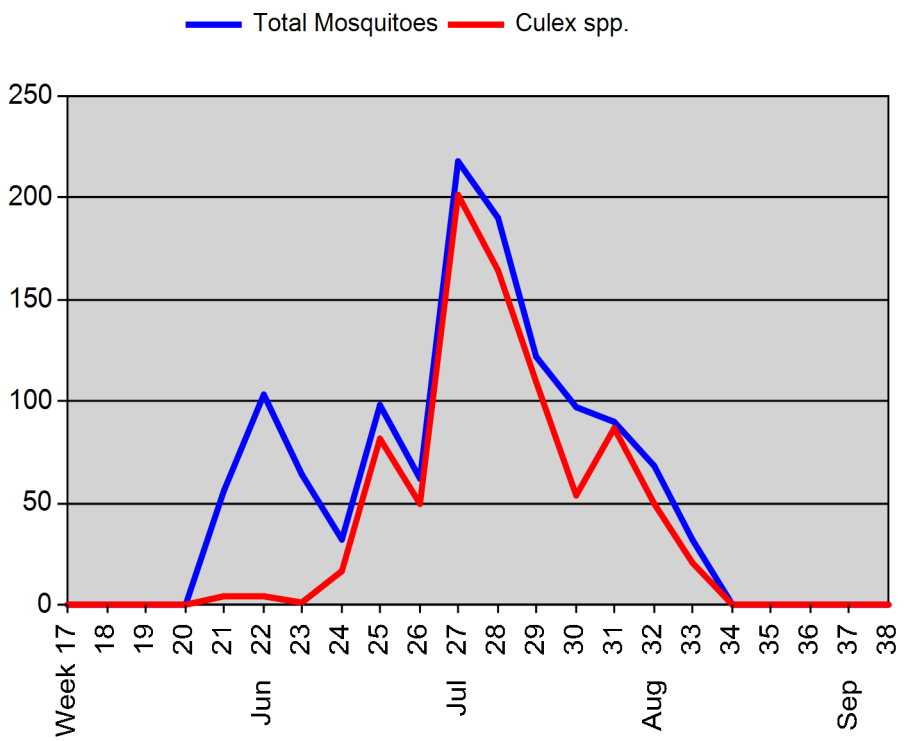
Season: 2015
Trap Type: Light/CO2 - BCZ2 Sentinel Zone
Location: Sunset St. at St. Vrain River
GPS: N40° 9.765', W105° 7.215'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	1,232
Average mosquitoes per trap/night:	95
Average Culex per trap/night:	65

Species collected and abundance:

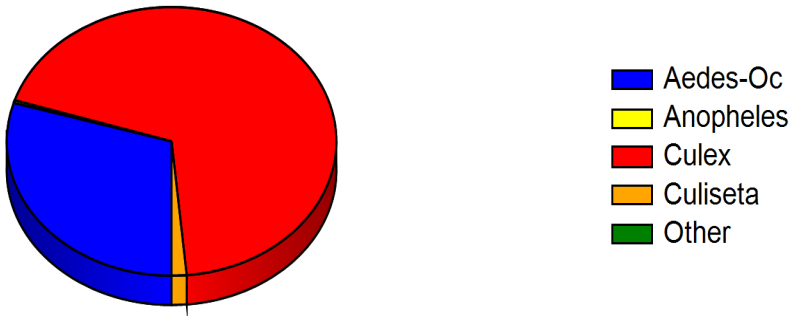
Aedes (Oc.) dorsalis	24	1.9 %
Aedes (Oc.) increpitus	5	0.4 %
Aedes (Oc.) melanimon	3	0.2 %
Aedes (Oc.) trivittatus	7	0.6 %
Aedes cinereus	2	0.2 %
Aedes vexans	324	26.3 %
Anopheles earlei	1	0.1 %
Anopheles hermsi	3	0.2 %
Culex pipiens	49	4.0 %
Culex salinarius	15	1.2 %
Culex tarsalis	781	63.4 %
Culiseta inornata	18	1.5 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	365	29.6 %
Anopheles	4	0.3 %
Culex	845	68.6 %
Culiseta	18	1.5 %
Other	0	0.0 %

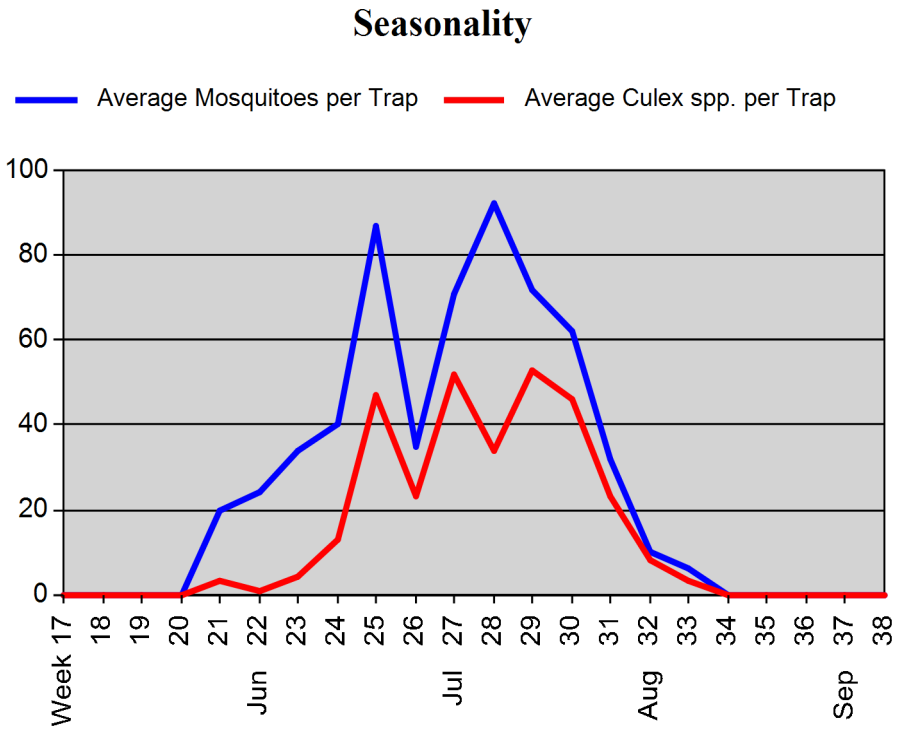


2015 BCZ3 Sentinel Zone Trap Composite Data

Total number of trap/nights set:	62
Total number of mosquitoes collected:	2,922
Average mosquitoes per trap/night:	47
Average Culex per trap/night:	25

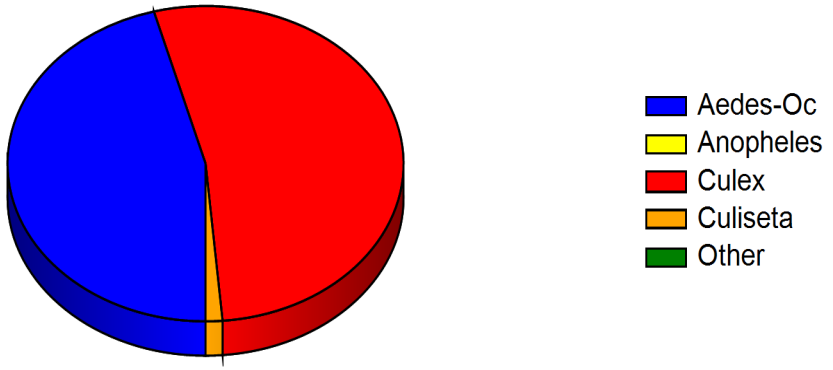
Species collected and abundance:

Aedes (Oc.) dorsalis	40	1.4 %
Aedes (Oc.) increpitus	8	0.3 %
Aedes (Oc.) melanimon	43	1.5 %
Aedes (Oc.) nigromaculis	3	0.1 %
Aedes (Oc.) trivittatus	15	0.5 %
Aedes cinereus	11	0.4 %
Aedes vexans	1218	41.7 %
Culex pipiens	67	2.3 %
Culex salinarius	14	0.5 %
Culex tarsalis	1463	50.1 %
Culiseta inornata	40	1.4 %



Genus proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	1,338	45.8 %
Anopheles	0	0.0 %
Culex	1,544	52.8 %
Culiseta	40	1.4 %
Other	0	0.0 %



ER-05: Erie Arapahoe Ridge

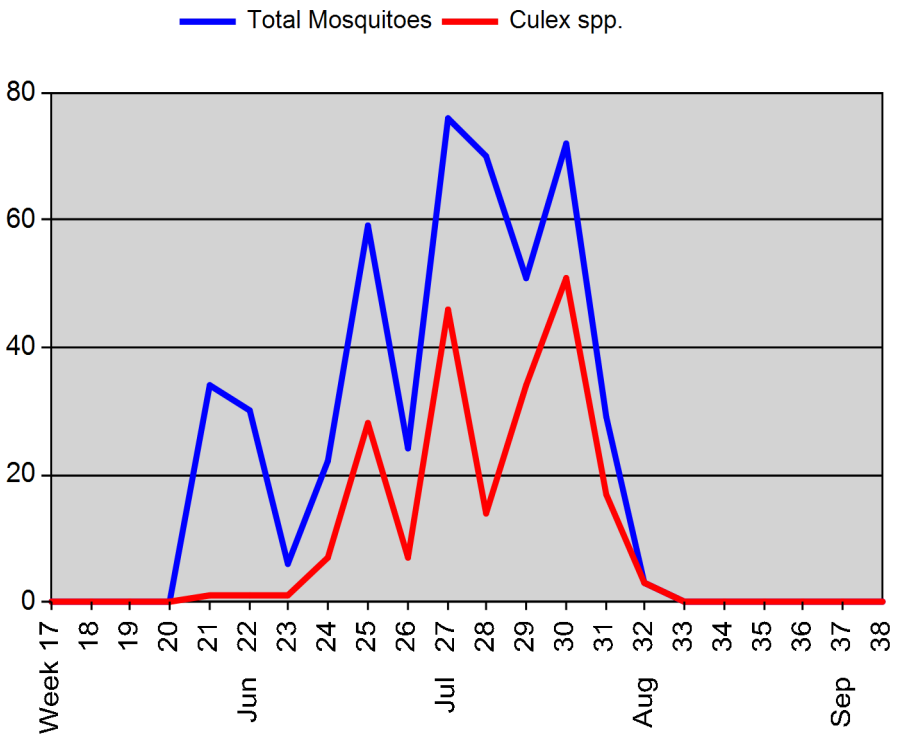
Season: 2015
Trap Type: Light/CO2 - BCZ3 Sentinel Zone
Location: 2785 Odell Dr., Erie 80516
GPS: N40° 1.230', W105° 5.455'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	476
Average mosquitoes per trap/night:	37
Average Culex per trap/night:	16

Species collected and abundance:

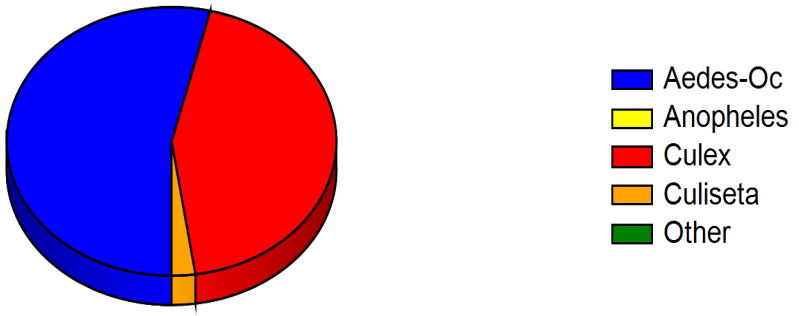
Aedes (Oc.) dorsalis	2	0.4 %
Aedes (Oc.) melanimon	26	5.5 %
Aedes (Oc.) trivittatus	4	0.8 %
Aedes vexans	224	47.1 %
Culex pipiens	11	2.3 %
Culex salinarius	1	0.2 %
Culex tarsalis	197	41.4 %
Culiseta inornata	11	2.3 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	256	53.8 %
Anopheles	0	0.0 %
Culex	209	43.9 %
Culiseta	11	2.3 %
Other	0	0.0 %



LA-01: Waneka Lake Park

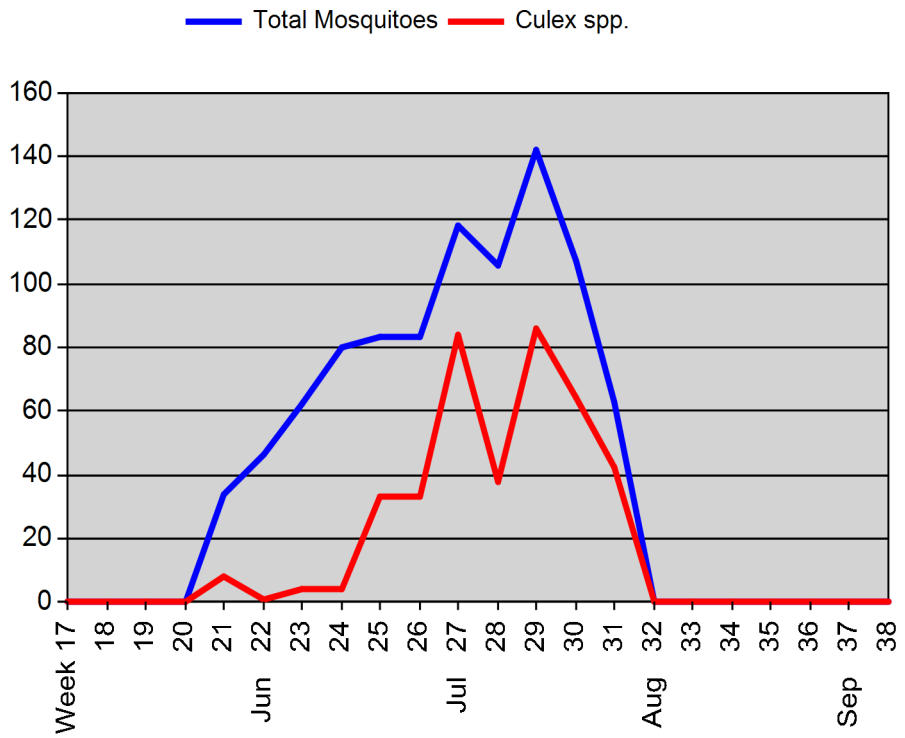
Season: 2015
Trap Type: Light/CO2 - BCZ3 Sentinel Zone
Location: north of Atlantis Avenue at Caria Drive
GPS: N39° 59.445', W105° 6.475'

Total number of trap/nights set:	10
Total number of mosquitoes collected:	841
Average mosquitoes per trap/night:	84
Average Culex per trap/night:	36

Species collected and abundance:

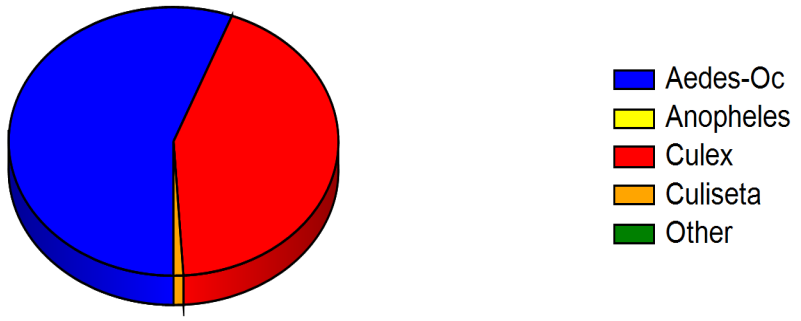
Aedes (Oc.) dorsalis	23	2.7 %
Aedes (Oc.) increpitus	1	0.1 %
Aedes (Oc.) melanimon	2	0.2 %
Aedes (Oc.) nigromaculis	3	0.4 %
Aedes (Oc.) trivittatus	3	0.4 %
Aedes vexans	437	52.0 %
Culex pipiens	29	3.4 %
Culex salinarius	2	0.2 %
Culex tarsalis	333	39.6 %
Culiseta inornata	8	1.0 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	469	55.8 %
Anopheles	0	0.0 %
Culex	364	43.3 %
Culiseta	8	1.0 %
Other	0	0.0 %



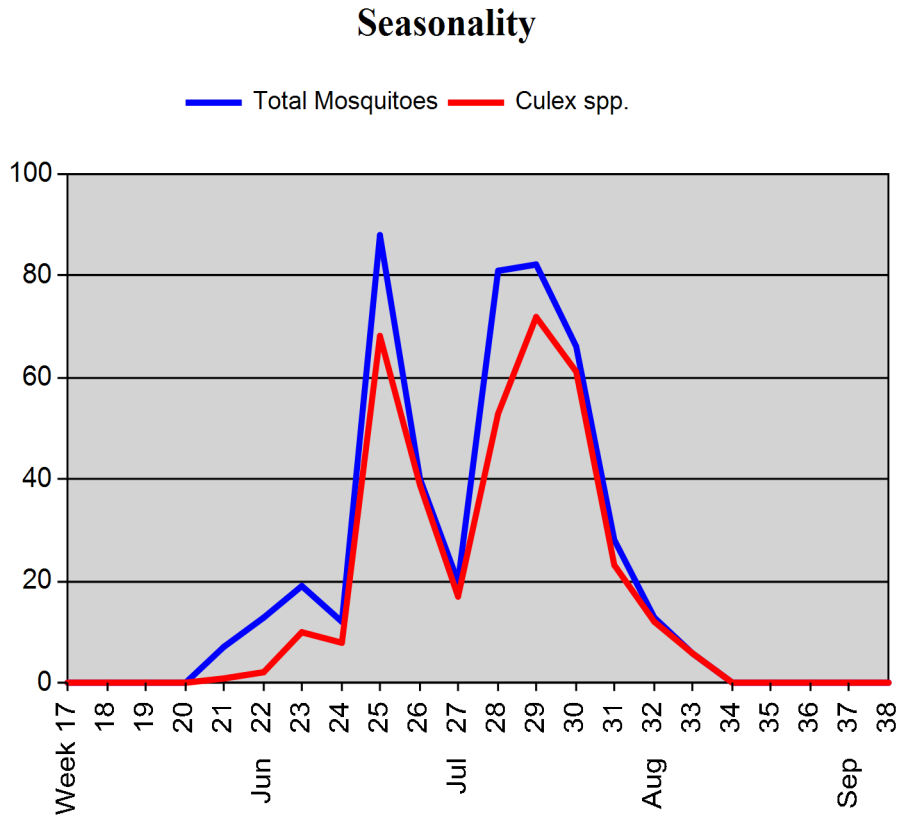
LA-10: Lafayette Finch at Elm

Season: 2015
Trap Type: Light/CO2 - BCZ3 Sentinel Zone
Location: North of Elm Street off Finch Avenue
GPS: N40° 0.160', W105° 5.040'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	475
Average mosquitoes per trap/night:	37
Average Culex per trap/night:	29

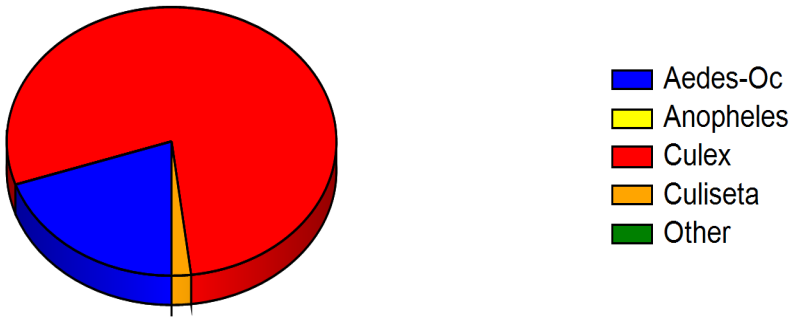
Species collected and abundance:

Aedes (Oc.) dorsalis	4	0.8 %
Aedes (Oc.) increpitus	2	0.4 %
Aedes (Oc.) melanimon	6	1.3 %
Aedes (Oc.) trivittatus	1	0.2 %
Aedes vexans	81	17.1 %
Culex pipiens	20	4.2 %
Culex salinarius	3	0.6 %
Culex tarsalis	349	73.5 %
Culiseta inornata	9	1.9 %



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	94	19.8 %
Anopheles	0	0.0 %
Culex	372	78.3 %
Culiseta	9	1.9 %
Other	0	0.0 %



LO-01: Coal Creek Golf Course

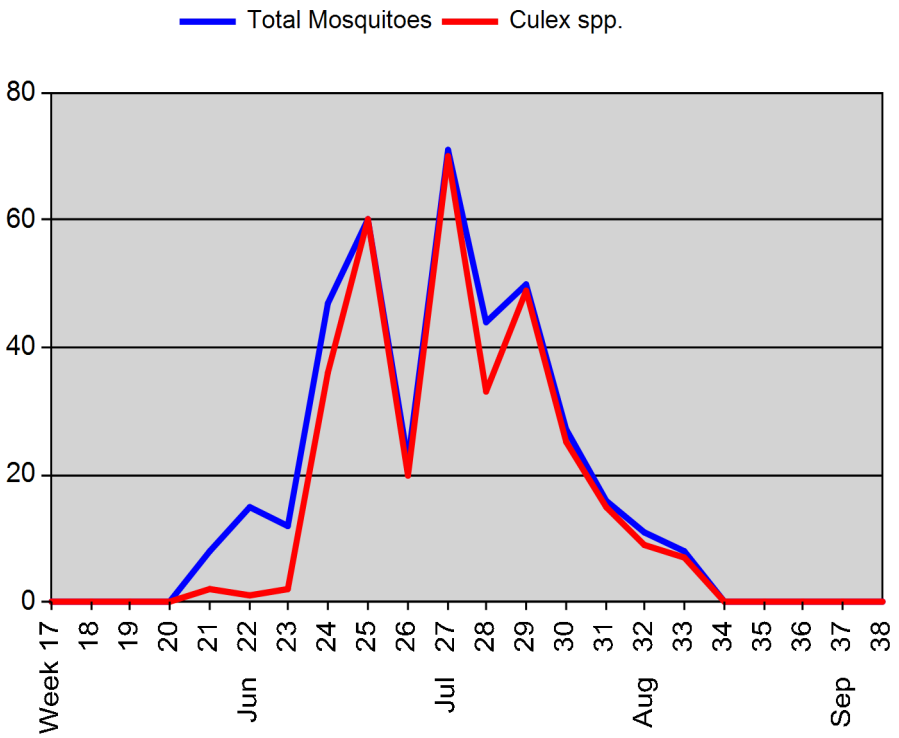
Season: 2015
Trap Type: Light/CO2 - BCZ3 Sentinel Zone
Location: Dillon Road at bridge over Coal Creek
GPS: N39° 57.465', W105° 9.120'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	391
Average mosquitoes per trap/night:	30
Average Culex per trap/night:	25

Species collected and abundance:

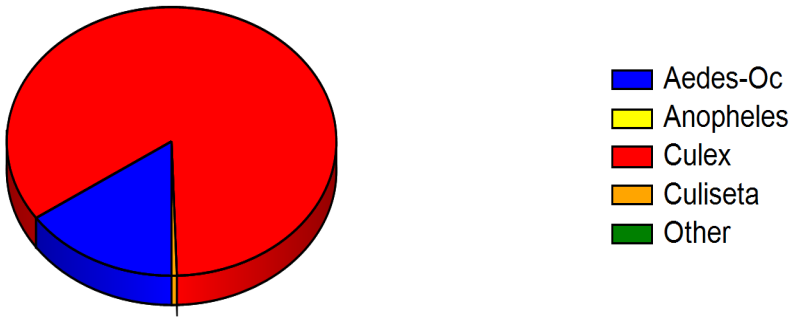
Aedes (Oc.) dorsalis	7	1.8 %
Aedes (Oc.) melanimon	3	0.8 %
Aedes cinereus	11	2.8 %
Aedes vexans	39	10.0 %
Culex salinarius	1	0.3 %
Culex tarsalis	328	83.9 %
Culiseta inornata	2	0.5 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	60	15.3 %
Anopheles	0	0.0 %
Culex	329	84.1 %
Culiseta	2	0.5 %
Other	0	0.0 %



LO-08: Coal Creek Trail

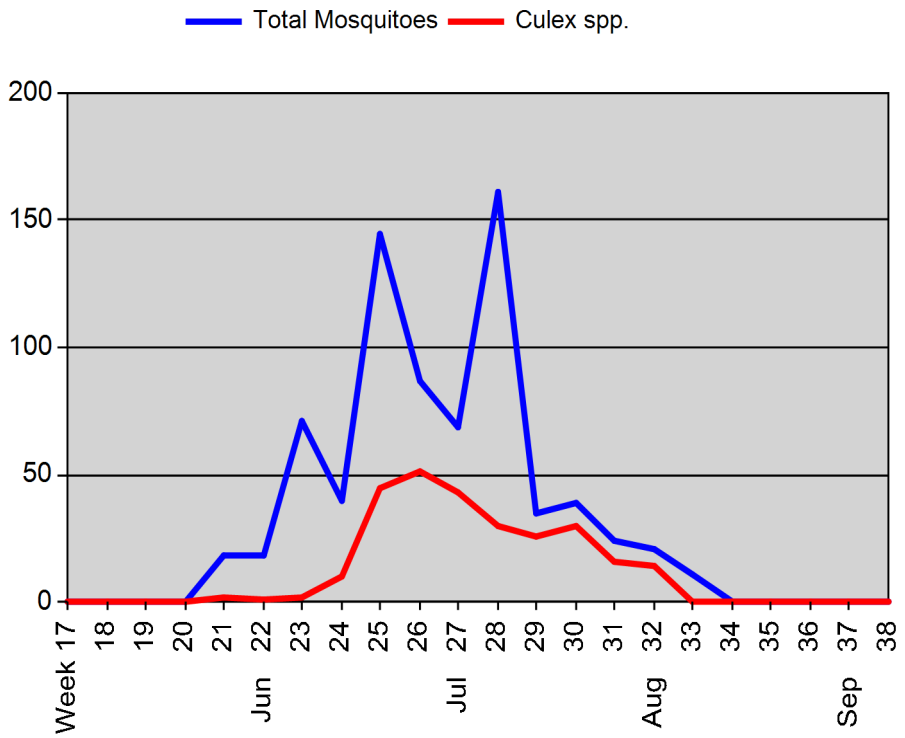
Season: 2015
Trap Type: Light/CO2 - BCZ3 Sentinel Zone
Location: Coal Creek Trailhead off Aspen Way
GPS: N39° 58.090', W105° 7.965'

Total number of trap/nights set:	13
Total number of mosquitoes collected:	739
Average mosquitoes per trap/night:	57
Average Culex per trap/night:	21

Species collected and abundance:

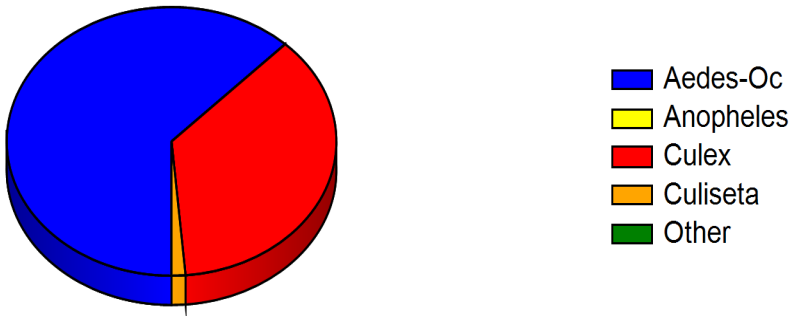
Aedes (Oc.) dorsalis	4	0.5 %
Aedes (Oc.) increpitus	5	0.7 %
Aedes (Oc.) melanimon	6	0.8 %
Aedes (Oc.) trivittatus	7	0.9 %
Aedes vexans	437	59.1 %
Culex pipiens	7	0.9 %
Culex salinarius	7	0.9 %
Culex tarsalis	256	34.6 %
Culiseta inornata	10	1.4 %

Seasonality



Genus Proportions:

Genus	Number	Percent of Total
Aedes/Ochlerotatus	459	62.1 %
Anopheles	0	0.0 %
Culex	270	36.5 %
Culiseta	10	1.4 %
Other	0	0.0 %



Colorado Mosquito Control

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-03	LIGHT	Boulder	06/01/2015	Jim Hamm Nature Area	105	0	9	0	0	**114**
LM-03	LIGHT	Boulder	06/08/2015	Jim Hamm Nature Area	231	0	18	3	0	**252**
LM-03	LIGHT	Boulder	06/15/2015	Jim Hamm Nature Area	131	0	3	0	0	**134**
LM-03	LIGHT	Boulder	06/22/2015	Jim Hamm Nature Area	118	0	47	1	0	**166**
LM-03	LIGHT	Boulder	06/29/2015	Jim Hamm Nature Area	66	0	292	9	0	**367**
LM-03	LIGHT	Boulder	07/06/2015	Jim Hamm Nature Area	139	0	264	6	0	**409**
LM-03	LIGHT	Boulder	07/13/2015	Jim Hamm Nature Area	1624	0	369	7	0	**2,000**
LM-03	LIGHT	Boulder	07/20/2015	Jim Hamm Nature Area	814	0	279	7	0	**1,100**
LM-03	LIGHT	Boulder	07/27/2015	Jim Hamm Nature Area	106	0	110	0	0	**216**
LM-03	LIGHT	Boulder	08/03/2015	Jim Hamm Nature Area	76	0	251	0	0	**327**
LM-03	LIGHT	Boulder	08/10/2015	Jim Hamm Nature Area	36	0	246	0	0	**282**
LM-03	LIGHT	Boulder	08/17/2015	Jim Hamm Nature Area	72	0	58	0	0	**130**
LM-03	LIGHT	Boulder	08/24/2015	Jim Hamm Nature Area	21	0	45	1	0	**67**
LM-09	LIGHT	Boulder	06/01/2015	Mountain View Cemetery	46	0	1	0	0	**47**
LM-09	LIGHT	Boulder	06/08/2015	Mountain View Cemetery	62	0	1	0	0	**63**
LM-09	LIGHT	Boulder	06/15/2015	Mountain View Cemetery	39	0	6	2	0	**47**
LM-09	LIGHT	Boulder	06/22/2015	Mountain View Cemetery	80	0	10	1	0	**91**
LM-09	LIGHT	Boulder	06/29/2015	Mountain View Cemetery	21	0	111	1	0	**133**
LM-09	LIGHT	Boulder	07/06/2015	Mountain View Cemetery	0	0	0	0	0	**0**
LM-09	LIGHT	Boulder	07/13/2015	Mountain View Cemetery	116	0	277	7	0	**400**
LM-09	LIGHT	Boulder	07/20/2015	Mountain View Cemetery	53	0	106	1	0	**160**
LM-09	LIGHT	Boulder	07/27/2015	Mountain View Cemetery	20	0	42	0	0	**62**
LM-09	LIGHT	Boulder	08/03/2015	Mountain View Cemetery	51	0	69	1	0	**121**
LM-09	LIGHT	Boulder	08/10/2015	Mountain View Cemetery	15	0	32	0	0	**47**
LM-09	LIGHT	Boulder	08/17/2015	Mountain View Cemetery	43	0	24	0	0	**67**
LM-09	LIGHT	Boulder	08/24/2015	Mountain View Cemetery	7	0	9	0	0	**16**
LM-10	LIGHT	Boulder	06/01/2015	Garden Acres Park	37	0	1	0	0	**38**
LM-10	LIGHT	Boulder	06/08/2015	Garden Acres Park	31	0	0	0	0	**31**
LM-10	LIGHT	Boulder	06/15/2015	Garden Acres Park	19	0	0	0	0	**19**
LM-10	LIGHT	Boulder	06/22/2015	Garden Acres Park	9	0	1	0	0	**10**
LM-10	LIGHT	Boulder	06/29/2015	Garden Acres Park	17	0	49	0	0	**66**
LM-10	LIGHT	Boulder	07/06/2015	Garden Acres Park	5	0	13	0	0	**18**
LM-10	LIGHT	Boulder	07/13/2015	Garden Acres Park	28	0	38	0	0	**66**
LM-10	LIGHT	Boulder	07/20/2015	Garden Acres Park	8	0	32	0	0	**40**
LM-10	LIGHT	Boulder	07/27/2015	Garden Acres Park	0	0	0	0	0	**0**
LM-10	LIGHT	Boulder	08/03/2015	Garden Acres Park	16	0	23	0	0	**39**
LM-10	LIGHT	Boulder	08/10/2015	Garden Acres Park	22	0	16	2	0	**40**
LM-10	LIGHT	Boulder	08/17/2015	Garden Acres Park	24	0	6	0	0	**30**
LM-10	LIGHT	Boulder	08/24/2015	Garden Acres Park	4	0	4	0	0	**8**
LM-17	LIGHT	Boulder	06/01/2015	The Shores-Concord Way	52	0	0	0	0	**52**
LM-17	LIGHT	Boulder	06/08/2015	The Shores-Concord Way	11	0	0	0	0	**11**
LM-17	LIGHT	Boulder	06/15/2015	The Shores-Concord Way	10	0	1	0	0	**11**

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-17	LIGHT	Boulder	06/22/2015	The Shores-Concord Way	6	0	14	1	0	**21**
LM-17	LIGHT	Boulder	06/29/2015	The Shores-Concord Way	10	0	21	0	0	**31**
LM-17	LIGHT	Boulder	07/06/2015	The Shores-Concord Way	20	0	35	0	0	**55**
LM-17	LIGHT	Boulder	07/13/2015	The Shores-Concord Way	18	0	108	0	0	**126**
LM-17	LIGHT	Boulder	07/20/2015	The Shores-Concord Way	16	0	56	0	0	**72**
LM-17	LIGHT	Boulder	07/27/2015	The Shores-Concord Way	13	0	15	0	0	**28**
LM-17	LIGHT	Boulder	08/03/2015	The Shores-Concord Way	9	0	31	0	0	**40**
LM-17	LIGHT	Boulder	08/10/2015	The Shores-Concord Way	28	0	22	0	0	**50**
LM-17	LIGHT	Boulder	08/17/2015	The Shores-Concord Way	43	0	16	0	0	**59**
LM-17	LIGHT	Boulder	08/24/2015	The Shores-Concord Way	10	0	5	0	0	**15**
LM-18	LIGHT	Boulder	06/01/2015	Twin Peaks Circle	66	0	0	0	0	**66**
LM-18	LIGHT	Boulder	06/08/2015	Twin Peaks Circle	38	0	3	0	0	**41**
LM-18	LIGHT	Boulder	06/15/2015	Twin Peaks Circle	20	0	2	0	0	**22**
LM-18	LIGHT	Boulder	06/22/2015	Twin Peaks Circle	21	0	9	0	0	**30**
LM-18	LIGHT	Boulder	06/29/2015	Twin Peaks Circle	17	0	39	0	0	**56**
LM-18	LIGHT	Boulder	07/06/2015	Twin Peaks Circle	5	0	16	0	0	**21**
LM-18	LIGHT	Boulder	07/13/2015	Twin Peaks Circle	47	0	38	0	3	**88**
LM-18	LIGHT	Boulder	07/20/2015	Twin Peaks Circle	32	0	54	0	0	**86**
LM-18	LIGHT	Boulder	07/27/2015	Twin Peaks Circle	23	0	53	0	0	**76**
LM-18	LIGHT	Boulder	08/03/2015	Twin Peaks Circle	53	0	44	0	0	**97**
LM-18	LIGHT	Boulder	08/10/2015	Twin Peaks Circle	72	0	60	1	0	**133**
LM-18	LIGHT	Boulder	08/17/2015	Twin Peaks Circle	64	1	23	0	0	**88**
LM-18	LIGHT	Boulder	08/24/2015	Twin Peaks Circle	59	1	8	0	0	**68**
LM-22	LIGHT	Weld	06/01/2015	Sandstone Ranch	50	0	40	0	0	**90**
LM-22	LIGHT	Weld	06/08/2015	Sandstone Ranch	67	0	6	0	0	**73**
LM-22	LIGHT	Weld	06/15/2015	Sandstone Ranch	142	0	9	0	0	**151**
LM-22	LIGHT	Weld	06/22/2015	Sandstone Ranch	216	1	154	2	0	**373**
LM-22	LIGHT	Weld	06/29/2015	Sandstone Ranch	122	0	345	1	0	**468**
LM-22	LIGHT	Weld	07/06/2015	Sandstone Ranch	18	0	260	2	0	**280**
LM-22	LIGHT	Weld	07/13/2015	Sandstone Ranch	13	0	175	1	0	**189**
LM-22	LIGHT	Weld	07/20/2015	Sandstone Ranch	108	0	186	1	0	**295**
LM-22	LIGHT	Weld	07/27/2015	Sandstone Ranch	30	0	255	1	0	**286**
LM-22	LIGHT	Weld	08/03/2015	Sandstone Ranch	73	0	627	0	0	**700**
LM-22	LIGHT	Weld	08/10/2015	Sandstone Ranch	8	0	253	0	0	**261**
LM-22	LIGHT	Weld	08/17/2015	Sandstone Ranch	46	0	58	0	0	**104**
LM-22	LIGHT	Weld	08/24/2015	Sandstone Ranch	22	0	3	17	0	**42**
LM-23	LIGHT	Weld	06/01/2015	Longmont Union Reservoi	52	0	1	0	0	**53**
LM-23	LIGHT	Weld	06/08/2015	Longmont Union Reservoi	64	0	14	0	0	**78**
LM-23	LIGHT	Weld	06/15/2015	Longmont Union Reservoi	19	0	0	0	0	**19**
LM-23	LIGHT	Weld	06/22/2015	Longmont Union Reservoi	2	0	25	0	0	**27**
LM-23	LIGHT	Weld	06/29/2015	Longmont Union Reservoi	2	0	100	0	0	**102**
LM-23	LIGHT	Weld	07/06/2015	Longmont Union Reservoi	5	0	86	0	0	**91**

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-23	LIGHT	Weld	07/13/2015	Longmont Union Reservoi	13	0	96	0	0	**109**
LM-23	LIGHT	Weld	07/20/2015	Longmont Union Reservoi	45	0	266	0	0	**311**
LM-23	LIGHT	Weld	07/27/2015	Longmont Union Reservoi	22	0	91	0	0	**113**
LM-23	LIGHT	Weld	08/03/2015	Longmont Union Reservoi	7	0	140	0	0	**147**
LM-23	LIGHT	Weld	08/10/2015	Longmont Union Reservoi	7	0	79	0	0	**86**
LM-23	LIGHT	Weld	08/17/2015	Longmont Union Reservoi	18	0	40	0	0	**58**
LM-23	LIGHT	Weld	08/24/2015	Longmont Union Reservoi	8	0	28	0	0	**36**
LM-27	LIGHT	Boulder	06/01/2015	Great Western/Mill Village	257	0	48	2	0	**307**
LM-27	LIGHT	Boulder	06/08/2015	Great Western/Mill Village	345	0	18	4	0	**367**
LM-27	LIGHT	Boulder	06/15/2015	Great Western/Mill Village	356	0	12	1	0	**369**
LM-27	LIGHT	Boulder	06/22/2015	Great Western/Mill Village	625	0	68	7	0	**700**
LM-27	LIGHT	Boulder	06/29/2015	Great Western/Mill Village	699	0	96	5	0	**800**
LM-27	LIGHT	Boulder	07/06/2015	Great Western/Mill Village	446	0	252	2	0	**700**
LM-27	LIGHT	Boulder	07/13/2015	Great Western/Mill Village	228	0	173	6	0	**407**
LM-27	LIGHT	Boulder	07/20/2015	Great Western/Mill Village	78	0	140	4	0	**222**
LM-27	LIGHT	Boulder	07/27/2015	Great Western/Mill Village	80	0	356	0	0	**436**
LM-27	LIGHT	Boulder	08/03/2015	Great Western/Mill Village	83	0	406	1	0	**490**
LM-27	LIGHT	Boulder	08/10/2015	Great Western/Mill Village	44	0	222	0	0	**266**
LM-27	LIGHT	Boulder	08/17/2015	Great Western/Mill Village	268	0	199	0	0	**467**
LM-27	LIGHT	Boulder	08/24/2015	Great Western/Mill Village	65	0	56	2	0	**123**
LM-28	LIGHT	Boulder	06/01/2015	St. Vrain Greenway at Em	56	0	8	0	0	**64**
LM-28	LIGHT	Boulder	06/08/2015	St. Vrain Greenway at Em	171	0	8	0	0	**179**
LM-28	LIGHT	Boulder	06/15/2015	St. Vrain Greenway at Em	76	0	1	0	0	**77**
LM-28	LIGHT	Boulder	06/22/2015	St. Vrain Greenway at Em	206	0	49	5	0	**260**
LM-28	LIGHT	Boulder	06/29/2015	St. Vrain Greenway at Em	88	0	89	1	0	**178**
LM-28	LIGHT	Boulder	07/06/2015	St. Vrain Greenway at Em	32	0	46	5	0	**83**
LM-28	LIGHT	Boulder	07/13/2015	St. Vrain Greenway at Em	57	0	224	1	0	**282**
LM-28	LIGHT	Boulder	07/20/2015	St. Vrain Greenway at Em	39	0	114	2	0	**155**
LM-28	LIGHT	Boulder	07/27/2015	St. Vrain Greenway at Em	50	0	170	0	0	**220**
LM-28	LIGHT	Boulder	08/03/2015	St. Vrain Greenway at Em	31	0	89	0	0	**120**
LM-28	LIGHT	Boulder	08/10/2015	St. Vrain Greenway at Em	5	0	74	0	0	**79**
LM-28	LIGHT	Boulder	08/17/2015	St. Vrain Greenway at Em	16	0	58	0	0	**74**
LM-28	LIGHT	Boulder	08/24/2015	St. Vrain Greenway at Em	14	0	17	0	0	**31**
LM-31	LIGHT	Boulder	06/01/2015	Left Hand Creek at Creeks	48	0	3	0	0	**51**
LM-31	LIGHT	Boulder	06/08/2015	Left Hand Creek at Creeks	49	0	2	0	0	**51**
LM-31	LIGHT	Boulder	06/15/2015	Left Hand Creek at Creeks	62	0	3	0	0	**65**
LM-31	LIGHT	Boulder	06/22/2015	Left Hand Creek at Creeks	135	0	8	2	0	**145**
LM-31	LIGHT	Boulder	06/29/2015	Left Hand Creek at Creeks	67	0	10	1	0	**78**
LM-31	LIGHT	Boulder	07/06/2015	Left Hand Creek at Creeks	57	0	13	0	0	**70**
LM-31	LIGHT	Boulder	07/13/2015	Left Hand Creek at Creeks	42	0	51	1	0	**94**
LM-31	LIGHT	Boulder	07/20/2015	Left Hand Creek at Creeks	17	0	21	0	0	**38**
LM-31	LIGHT	Boulder	07/27/2015	Left Hand Creek at Creeks	2	0	84	0	0	**86**

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-31	LIGHT	Boulder	08/03/2015	Left Hand Creek at Creeks	15	0	33	0	0	**48**
LM-31	LIGHT	Boulder	08/10/2015	Left Hand Creek at Creeks	4	0	37	0	0	**41**
LM-31	LIGHT	Boulder	08/17/2015	Left Hand Creek at Creeks	8	0	29	0	0	**37**
LM-31	LIGHT	Boulder	08/24/2015	Left Hand Creek at Creeks	2	0	2	0	0	**4**
LM-34	LIGHT	Boulder	06/01/2015	Longmont Meadow View	35	0	3	0	0	**38**
LM-34	LIGHT	Boulder	06/08/2015	Longmont Meadow View	43	0	4	0	0	**47**
LM-34	LIGHT	Boulder	06/15/2015	Longmont Meadow View	39	0	1	0	0	**40**
LM-34	LIGHT	Boulder	06/22/2015	Longmont Meadow View	54	0	32	1	0	**87**
LM-34	LIGHT	Boulder	06/29/2015	Longmont Meadow View	23	0	43	0	0	**66**
LM-34	LIGHT	Boulder	07/06/2015	Longmont Meadow View	34	0	32	0	0	**66**
LM-34	LIGHT	Boulder	07/13/2015	Longmont Meadow View	31	0	381	1	0	**413**
LM-34	LIGHT	Boulder	07/20/2015	Longmont Meadow View	87	0	258	0	0	**345**
LM-34	LIGHT	Boulder	07/27/2015	Longmont Meadow View	52	0	207	0	0	**259**
LM-34	LIGHT	Boulder	08/03/2015	Longmont Meadow View	76	0	69	0	0	**145**
LM-34	LIGHT	Boulder	08/10/2015	Longmont Meadow View	13	0	47	0	0	**60**
LM-34	LIGHT	Boulder	08/17/2015	Longmont Meadow View	23	0	36	0	1	**60**
LM-34	LIGHT	Boulder	08/24/2015	Longmont Meadow View	43	0	16	0	0	**59**
LM-40	LIGHT	Boulder	06/01/2015	Liberty Court	33	0	1	0	0	**34**
LM-40	LIGHT	Boulder	06/08/2015	Liberty Court	13	0	0	0	0	**13**
LM-40	LIGHT	Boulder	06/15/2015	Liberty Court	25	0	0	1	0	**26**
LM-40	LIGHT	Boulder	06/22/2015	Liberty Court	12	0	9	0	0	**21**
LM-40	LIGHT	Boulder	06/29/2015	Liberty Court	2	0	37	0	0	**39**
LM-40	LIGHT	Boulder	07/06/2015	Liberty Court	7	0	21	0	0	**28**
LM-40	LIGHT	Boulder	07/13/2015	Liberty Court	59	0	58	1	0	**118**
LM-40	LIGHT	Boulder	07/20/2015	Liberty Court	29	0	31	0	0	**60**
LM-40	LIGHT	Boulder	07/27/2015	Liberty Court	16	0	39	0	0	**55**
LM-40	LIGHT	Boulder	08/03/2015	Liberty Court	6	0	48	1	0	**55**
LM-40	LIGHT	Boulder	08/10/2015	Liberty Court	8	0	19	0	0	**27**
LM-40	LIGHT	Boulder	08/17/2015	Liberty Court	10	0	8	0	0	**18**
LM-40	LIGHT	Boulder	08/24/2015	Liberty Court	9	0	5	0	0	**14**
LM-41	LIGHT	Boulder	06/01/2015	Stoney Ridge/Alpine Elem	62	0	1	0	0	**63**
LM-41	LIGHT	Boulder	06/08/2015	Stoney Ridge/Alpine Elem	61	0	7	0	0	**68**
LM-41	LIGHT	Boulder	06/15/2015	Stoney Ridge/Alpine Elem	23	0	2	0	0	**25**
LM-41	LIGHT	Boulder	06/22/2015	Stoney Ridge/Alpine Elem	91	0	147	3	0	**241**
LM-41	LIGHT	Boulder	06/29/2015	Stoney Ridge/Alpine Elem	12	0	152	1	0	**165**
LM-41	LIGHT	Boulder	07/06/2015	Stoney Ridge/Alpine Elem	3	0	111	1	0	**115**
LM-41	LIGHT	Boulder	07/13/2015	Stoney Ridge/Alpine Elem	151	0	349	7	0	**507**
LM-41	LIGHT	Boulder	07/20/2015	Stoney Ridge/Alpine Elem	89	0	161	3	0	**253**
LM-41	LIGHT	Boulder	07/27/2015	Stoney Ridge/Alpine Elem	15	0	104	0	0	**119**
LM-41	LIGHT	Boulder	08/03/2015	Stoney Ridge/Alpine Elem	21	0	118	0	0	**139**
LM-41	LIGHT	Boulder	08/10/2015	Stoney Ridge/Alpine Elem	26	0	141	0	0	**167**
LM-41	LIGHT	Boulder	08/17/2015	Stoney Ridge/Alpine Elem	14	0	14	0	0	**28**

Colorado Mosquito Control

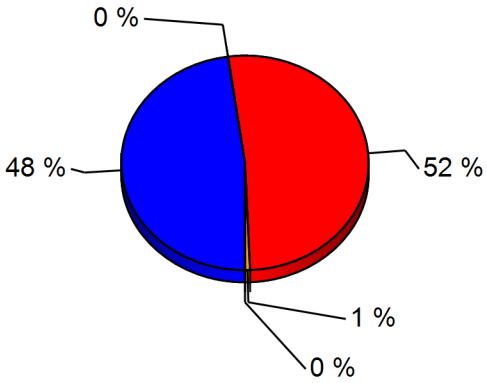
Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-41	LIGHT	Boulder	08/24/2015	Stoney Ridge/Alpine Elem	11	0	28	0	0	**39**
LM-42	LIGHT	Boulder	06/01/2015	Izaak Walton Park	52	0	4	0	0	**56**
LM-42	LIGHT	Boulder	06/08/2015	Izaak Walton Park	98	0	4	1	0	**103**
LM-42	LIGHT	Boulder	06/15/2015	Izaak Walton Park	58	0	1	5	0	**64**
LM-42	LIGHT	Boulder	06/22/2015	Izaak Walton Park	13	0	17	2	0	**32**
LM-42	LIGHT	Boulder	06/29/2015	Izaak Walton Park	13	2	82	1	0	**98**
LM-42	LIGHT	Boulder	07/06/2015	Izaak Walton Park	9	0	50	3	0	**62**
LM-42	LIGHT	Boulder	07/13/2015	Izaak Walton Park	17	0	201	0	0	**218**
LM-42	LIGHT	Boulder	07/20/2015	Izaak Walton Park	21	0	164	5	0	**190**
LM-42	LIGHT	Boulder	07/27/2015	Izaak Walton Park	12	0	110	0	0	**122**
LM-42	LIGHT	Boulder	08/03/2015	Izaak Walton Park	43	0	54	0	0	**97**
LM-42	LIGHT	Boulder	08/10/2015	Izaak Walton Park	2	0	87	1	0	**90**
LM-42	LIGHT	Boulder	08/17/2015	Izaak Walton Park	18	0	50	0	0	**68**
LM-42	LIGHT	Boulder	08/24/2015	Izaak Walton Park	9	2	21	0	0	**32**
LM-43	LIGHT	Boulder	06/01/2015	Rough & Ready South	109	0	6	0	0	**115**
LM-43	LIGHT	Boulder	06/08/2015	Rough & Ready South	114	0	6	0	0	**120**
LM-43	LIGHT	Boulder	06/15/2015	Rough & Ready South	39	0	2	0	0	**41**
LM-43	LIGHT	Boulder	06/22/2015	Rough & Ready South	37	0	42	4	0	**83**
LM-43	LIGHT	Boulder	06/29/2015	Rough & Ready South	20	0	77	1	0	**98**
LM-43	LIGHT	Boulder	07/06/2015	Rough & Ready South	12	0	130	0	0	**142**
LM-43	LIGHT	Boulder	07/13/2015	Rough & Ready South	144	0	446	10	0	**600**
LM-43	LIGHT	Boulder	07/20/2015	Rough & Ready South	75	0	67	0	0	**142**
LM-43	LIGHT	Boulder	07/27/2015	Rough & Ready South	10	0	59	0	0	**69**
LM-43	LIGHT	Boulder	08/03/2015	Rough & Ready South	15	0	62	0	0	**77**
LM-43	LIGHT	Boulder	08/10/2015	Rough & Ready South	4	0	51	0	0	**55**
LM-43	LIGHT	Boulder	08/17/2015	Rough & Ready South	9	0	19	1	0	**29**
LM-43	LIGHT	Boulder	08/24/2015	Rough & Ready South	5	0	6	0	0	**11**
LM-44	LIGHT	Boulder	06/01/2015	Reserve at Somerset Mea	25	0	0	0	0	**25**
LM-44	LIGHT	Boulder	06/08/2015	Reserve at Somerset Mea	37	0	0	0	0	**37**
LM-44	LIGHT	Boulder	06/15/2015	Reserve at Somerset Mea	21	0	0	0	0	**21**
LM-44	LIGHT	Boulder	06/22/2015	Reserve at Somerset Mea	55	0	9	0	0	**64**
LM-44	LIGHT	Boulder	06/29/2015	Reserve at Somerset Mea	34	0	11	0	0	**45**
LM-44	LIGHT	Boulder	07/06/2015	Reserve at Somerset Mea	40	0	9	0	0	**49**
LM-44	LIGHT	Boulder	07/13/2015	Reserve at Somerset Mea	17	0	41	2	0	**60**
LM-44	LIGHT	Boulder	07/20/2015	Reserve at Somerset Mea	20	0	22	0	0	**42**
LM-44	LIGHT	Boulder	07/27/2015	Reserve at Somerset Mea	12	0	14	0	0	**26**
LM-44	LIGHT	Boulder	08/03/2015	Reserve at Somerset Mea	13	0	7	0	0	**20**
LM-44	LIGHT	Boulder	08/10/2015	Reserve at Somerset Mea	6	0	17	0	0	**23**
LM-44	LIGHT	Boulder	08/17/2015	Reserve at Somerset Mea	14	0	29	0	0	**43**

Colorado Mosquito Control

Adult Trap Data - Genus Summary

Trap #	Type	County	Date		Ae/Oc	An	Cx	Cs	Other	TOTAL
LM-44	LIGHT	Boulder	08/24/2015	Reserve at Somerset Mea	7	0	1	0	0	**8**
					13,797		**14,879**		**4**	
						7		**184**		**28,871**



	TOTAL	%
Aedes-Oc	**13,797**	**48 %**
Anopheles	**7**	**0 %**
Culex	**14,879**	**52 %**
Culiseta	**184**	**1 %**
Other	**4**	**0 %**

Colorado Mosquito Control

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S317920		Boulder						
	06/08/2015	LM-03	16	Culex tarsalis	LIGHT	BCSZ2	NEGATIVE	0.000
	06/08/2015	LM-28	7	Culex tarsalis	LIGHT	BCSZ2	NEGATIVE	0.000
	06/08/2015	LM-31	2	Culex tarsalis	LIGHT	BCSZ2	NEGATIVE	0.000
	06/08/2015	LM-42	4	Culex tarsalis	LIGHT	BCSZ2	NEGATIVE	0.000
						Total in pool	**29**	
S317921		Boulder						
	06/08/2015	LM-03	2	Culex pipiens	LIGHT	BCSZ2	NEGATIVE	0.000
	06/08/2015	LM-28	1	Culex pipiens	LIGHT	BCSZ2	NEGATIVE	0.000
						Total in pool	**3**	
S317922		Boulder						
	06/08/2015	LA-01	1	Culex tarsalis	LIGHT	BCSZ3	NEGATIVE	0.000
	06/08/2015	LA-10	2	Culex tarsalis	LIGHT	BCSZ3	NEGATIVE	0.000
	06/08/2015	LO-01	1	Culex tarsalis	LIGHT	BCSZ3	NEGATIVE	0.000
	06/08/2015	LO-08	1	Culex tarsalis	LIGHT	BCSZ3	NEGATIVE	0.000
						Total in pool	**5**	
S317928		Boulder						
	06/15/2015	LM-03	2	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/15/2015	LM-28	1	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/15/2015	LM-31	3	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/15/2015	LM-42	1	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**7**	
S317929		Boulder						
	06/15/2015	ER-05	1	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/15/2015	LA-01	4	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/15/2015	LA-10	8	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/15/2015	LO-01	2	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/15/2015	LO-08	2	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**17**	
S317930		Boulder						
	06/15/2015	LA-10	2	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**2**	
S317938		Boulder						
	06/22/2015	LM-10	1	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/22/2015	LM-28	47	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/22/2015	LM-42	15	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**63**	
S317939		Boulder						
	06/22/2015	LM-03	46	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/22/2015	LM-31	8	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**54**	

Colorado Mosquito Control

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S317940		Boulder						
	06/22/2015	LM-42	2	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**2**	
S317941		Boulder						
	06/22/2015	ER-05	7	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/22/2015	LA-01	2	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/22/2015	LA-10	7	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/22/2015	LO-01	36	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/22/2015	LO-08	10	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**62**	
S317942		Boulder						
	06/22/2015	LA-01	2	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	06/22/2015	LA-10	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**3**	
S317973		Boulder						
	06/29/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317974		Boulder						
	06/29/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317975		Boulder						
	06/29/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317976		Boulder						
	06/29/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317977		Boulder						
	06/29/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317978		Boulder						
	06/29/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S317979		Boulder						
	06/29/2015	LM-03	32	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/29/2015	LM-28	15	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	06/29/2015	LM-42	15	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**62**	
S317980		Boulder						
	06/29/2015	LM-10	46	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
	06/29/2015	LM-31	10	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**56**	
S317981		Boulder						
	06/29/2015	LM-10	3	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	06/29/2015	LM-28	4	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**7**	
S317982		Boulder						
	06/29/2015	LO-01	60	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**60**	
S317983		Boulder						
	06/29/2015	LA-10	65	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S317984		Boulder						
	06/29/2015	ER-05	28	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/29/2015	LA-01	33	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	06/29/2015	LA-10	1	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**62**	
S317985		Boulder						
	06/29/2015	LO-08	44	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**44**	
S318021		Boulder						
	07/06/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318022		Boulder						
	07/06/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318023		Boulder						
	07/06/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318024		Boulder						
	07/06/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318025		Boulder						
	07/06/2015	LM-03	1	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/06/2015	LM-10	13	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/06/2015	LM-42	50	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**64**	
S318026		Boulder						
	07/06/2015	LM-28	44	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
	07/06/2015	LM-31	12	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**56**	
S318027		Boulder						
	07/06/2015	LM-03	3	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/06/2015	LM-31	1	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**4**	
S318028		Boulder						
	07/06/2015	LO-08	51	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**51**	
S318029		Boulder						
	07/06/2015	ER-05	6	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/06/2015	LA-10	38	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/06/2015	LO-01	20	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**64**	
S318030		Boulder						
	07/06/2015	ER-05	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	07/06/2015	LA-10	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**2**	
S318064		Boulder						
	07/13/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318065		Boulder						
	07/13/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318066		Boulder						
	07/13/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318067		Boulder						
	07/13/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318068		Boulder						
	07/13/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318069		Boulder						
	07/13/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318070		Boulder						
	07/13/2015	LM-03	30	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/13/2015	LM-10	35	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S318071		Boulder						
	07/13/2015	LM-28	14	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/13/2015	LM-31	51	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318072		Boulder						
	07/13/2015	LM-03	1	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/13/2015	LM-10	3	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/13/2015	LM-28	4	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**8**	
S318073		Boulder						
	07/13/2015	LA-01	65	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318074		Boulder						
	07/13/2015	LO-01	65	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318075		Boulder						
	07/13/2015	LA-01	19	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/13/2015	LO-01	5	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/13/2015	LO-08	41	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318076		Boulder						
	07/13/2015	ER-05	46	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/13/2015	LA-10	17	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**63**	
S318077		Boulder						
	07/13/2015	LA-01	5	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	07/13/2015	LO-08	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**6**	
S318111		Boulder						
	07/20/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318112		Boulder						
	07/20/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318113		Boulder						
	07/20/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318114		Boulder						
	07/20/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S318115		Boulder						
	07/20/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318116		Boulder						
	07/20/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318117		Boulder						
	07/20/2015	LM-10	31	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-31	20	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-42	14	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318118		Boulder						
	07/20/2015	LM-03	25	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-28	40	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318119		Boulder						
	07/20/2015	LM-03	5	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-10	1	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-28	7	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/20/2015	LM-42	20	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**33**	
S318240		Boulder						
	08/10/2015	LM-42	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318241		Boulder						
	08/10/2015	LM-28	9	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/10/2015	LM-31	36	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/10/2015	LM-42	11	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**56**	
S318242		Boulder						
	08/10/2015	LM-03	4	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	08/10/2015	LM-31	1	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	08/10/2015	LM-42	8	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**13**	
S318243		Boulder						
	08/10/2015	ER-05	14	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/10/2015	LO-01	15	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/10/2015	LO-08	15	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**44**	
S318244		Boulder						
	08/10/2015	LA-01	41	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
	08/10/2015	LA-10	20	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**61**	
S318245		Boulder						
	08/10/2015	ER-05	2	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	08/10/2015	LA-01	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	08/10/2015	LA-10	3	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
	08/10/2015	LO-08	1	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**7**	
S318270		Boulder						
	08/17/2015	LM-03	57	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/17/2015	LM-10	6	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**63**	
S318271		Boulder						
	08/17/2015	LM-28	53	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
	08/17/2015	LM-31	10	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**63**	
S318272		Boulder						
	08/17/2015	LM-31	13	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/17/2015	LM-42	44	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**57**	
S318273		Boulder						
	08/17/2015	LM-28	5	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	08/17/2015	LM-31	5	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	08/17/2015	LM-42	4	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**14**	
S318274		Boulder						
	08/17/2015	ER-05	3	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/17/2015	LA-10	10	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/17/2015	LO-01	9	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/17/2015	LO-08	14	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**36**	
S318289		Boulder						
	08/24/2015	LM-03	38	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**38**	
S318290		Boulder						
	08/24/2015	LM-10	3	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/24/2015	LM-28	13	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/24/2015	LM-31	1	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/24/2015	LM-42	12	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**29**	

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S318291		Boulder						
	08/24/2015	LM-03	7	Culex pipiens	LIGHT	BCZ2	POSITIVE	0.000
	08/24/2015	LM-28	1	Culex pipiens	LIGHT	BCZ2	POSITIVE	0.000
	08/24/2015	LM-31	1	Culex pipiens	LIGHT	BCZ2	POSITIVE	0.000
	08/24/2015	LM-42	9	Culex pipiens	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**18**	
S318292		Boulder						
	08/24/2015	LA-10	2	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/24/2015	LO-01	7	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**9**	
S318335		Boulder						
	08/10/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**65**	
S318336		Boulder						
	08/10/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**65**	
S318337		Boulder						
	08/10/2015	LM-03	65	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**65**	
S318338		Boulder						
	08/10/2015	LM-03	44	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/10/2015	LM-10	15	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**59**	
S318339		Boulder						
	08/10/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318340		Boulder						
	07/20/2015	ER-05	14	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/20/2015	LA-10	51	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318341		Boulder						
	07/20/2015	LO-01	33	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/20/2015	LO-08	27	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**60**	
S318342		Boulder						
	07/20/2015	LA-01	34	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**34**	
S318343		Boulder						
	07/20/2015	LA-01	4	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
	07/20/2015	LA-10	2	Culex pipiens	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**6**	
S318368		Boulder						
	07/27/2015	LM-03	54	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**54**	
S318369		Boulder						
	07/27/2015	LM-03	53	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**53**	
S318370		Boulder						
	07/27/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318371		Boulder						
	07/27/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318372		Boulder						
	07/27/2015	LM-31	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318373		Boulder						
	07/27/2015	LM-28	38	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	07/27/2015	LM-31	19	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**57**	
S318374		Boulder						
	07/27/2015	LM-42	51	Culex tarsalis	LIGHT	BCZ2	POSITIVE	0.000
						Total in pool	**51**	
S318375		Boulder						
	07/27/2015	LM-42	51	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**51**	
S318376		Boulder						
	07/27/2015	LM-03	1	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
	07/27/2015	LM-42	6	Culex pipiens	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**7**	
S318377		Boulder						
	07/27/2015	LA-01	65	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318378		Boulder						
	07/27/2015	LA-10	65	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**65**	
S318379		Boulder						
	07/27/2015	LA-01	14	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
	07/27/2015	LO-01	48	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**62**	
S318380		Boulder						
	07/27/2015	ER-05	30	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/27/2015	LA-10	4	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	07/27/2015	LO-08	21	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**55**	
S318381		Boulder						
	07/27/2015	ER-05	4	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	07/27/2015	LA-01	7	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	07/27/2015	LA-10	2	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	07/27/2015	LO-08	3	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
						Total in pool	**16**	
S318418		Boulder						
	08/03/2015	LM-03	62	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**62**	
S318419		Boulder						
	08/03/2015	LM-03	62	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**62**	
S318420		Boulder						
	08/03/2015	LM-03	62	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**62**	
S318421		Boulder						
	08/03/2015	LM-03	62	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**62**	
S318422		Boulder						
	08/03/2015	LM-28	65	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**65**	
S318423		Boulder						
	08/03/2015	LM-10	8	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/03/2015	LM-28	23	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/03/2015	LM-31	33	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**64**	
S318424		Boulder						
	08/03/2015	LM-10	13	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
	08/03/2015	LM-42	51	Culex tarsalis	LIGHT	BCZ2	NEGATIVE	0.000
						Total in pool	**64**	
S318425		Boulder						
	08/03/2015	ER-05	47	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**47**	

Colorado Mosquito Control

Mosquito Pool Testing

Sample	Collection	Trap	Quantity	Species	Type	Notes	Results	MIR
S318426		Boulder						
	08/03/2015	LA-01	57	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**57**	
S318427		Boulder						
	08/03/2015	LA-10	58	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**58**	
S318428		Boulder						
	08/03/2015	LO-01	25	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
	08/03/2015	LO-08	28	Culex tarsalis	LIGHT	BCZ3	NEGATIVE	0.000
						Total in pool	**53**	
S318429		Boulder						
	08/03/2015	ER-05	4	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	08/03/2015	LA-01	5	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	08/03/2015	LA-10	3	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
	08/03/2015	LO-08	2	Culex pipiens	LIGHT	BCZ3	POSITIVE	0.000
						Total in pool	**14**	

Colorado Mosquito Control

Adulticide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
Longmont, City of					
Truck					
07/09/2015	43	Aqualuer	21:36:00	22:41:00	13.0
07/09/2015	41	Aqualuer	20:15:00	21:22:00	12.0
07/09/2015	27	Aqualuer	21:12:00	21:41:00	5.0
07/09/2015	22	Aqualuer	23:20:00	23:41:00	4.0
07/09/2015	03	Aqualuer	22:48:00	23:20:00	5.0
07/16/2015	43	Aqualuer	23:48:00	12:50:00	13.0
07/16/2015	42	Aqualuer	21:42:00	22:14:00	4.0
07/16/2015	41	Aqualuer	21:50:00	22:47:00	10.0
07/16/2015	40	Aqualuer	22:51:00	23:37:00	9.0
07/16/2015	34	Aqualuer	20:15:00	21:31:00	11.0
07/16/2015	28	Aqualuer	22:30:00	23:29:00	11.0
07/16/2015	27	Aqualuer	23:33:00	12:07:00	5.0
07/16/2015	23	Aqualuer	01:03:00	01:28:00	5.0
07/16/2015	22	Aqualuer	12:18:00	12:52:00	3.0
07/16/2015	17	Aqualuer	20:23:00	21:09:00	8.0
07/16/2015	09	Aqualuer	21:32:00	21:35:00	2.0
07/16/2015	03	Aqualuer	12:55:00	01:25:00	5.0
07/23/2015	43	Aqualuer	23:36:00	12:35:00	13.0
07/23/2015	42	Aqualuer	21:34:00	21:58:00	5.0
07/23/2015	41	Aqualuer	22:44:00	23:30:00	10.0
07/23/2015	34	Aqualuer	20:24:00	21:22:00	10.0
07/23/2015	28	Aqualuer	20:25:00	21:13:00	10.0
07/23/2015	27	Aqualuer	21:17:00	21:47:00	4.0
07/23/2015	23	Aqualuer	01:19:00	01:44:00	6.0
07/23/2015	22	Aqualuer	21:55:00	22:19:00	3.0
07/23/2015	09	Aqualuer	22:08:00	22:36:00	5.0
07/23/2015	03	Aqualuer	12:47:00	01:10:00	5.0
07/30/2015	42	Aqualuer	21:32:00	21:56:00	5.0
07/30/2015	41	Aqualuer	01:10:00	01:52:00	9.0
07/30/2015	34	Aqualuer	20:22:00	21:18:00	10.0
07/30/2015	28	Aqualuer	22:10:00	22:54:00	10.0
07/30/2015	27	Aqualuer	23:00:00	23:26:00	5.0
07/30/2015	23	Aqualuer	12:01:00	12:28:00	6.0
07/30/2015	22	Aqualuer	23:32:00	23:49:00	4.0
07/30/2015	03	Aqualuer	12:37:00	01:00:00	4.0
08/06/2015	41	Aqualuer	23:07:00	23:56:00	10.0
08/06/2015	28	Aqualuer	20:10:00	20:54:00	10.0
08/06/2015	27	Aqualuer	21:00:00	21:26:00	5.0
08/06/2015	23	Aqualuer	21:58:00	22:26:00	6.0
08/06/2015	22	Aqualuer	21:34:00	21:50:00	3.0

Colorado Mosquito Control

Adulticide Data

Customer	Subdiv/Area	Material	Start Time	End Time	Miles
08/06/2015	03	Aqualuer	22:35:00	22:55:00	4.0
08/07/2015	34	Aqualuer	12:44:00	01:30:00	10.0
08/07/2015	09	Aqualuer	12:10:00	12:30:00	4.0
08/13/2015	Twin Peaks	Aqualuer	20:38:00	21:15:00	7.0
08/13/2015	Sandstone Ranch	Aqualuer	23:23:00	23:43:00	3.0
08/13/2015	Rough and Ready	Aqualuer	21:36:00	22:30:00	10.0
08/13/2015	Jim Hamm	Aqualuer	23:53:00	12:18:00	5.0
08/13/2015	Great Western	Aqualuer	22:44:00	23:14:00	5.0
08/20/2015	27	Aqualuer	20:00:00	20:25:00	5.0
08/20/2015	22	Aqualuer	20:32:00	20:51:00	4.0
08/20/2015	03	Aqualuer	21:05:00	21:34:00	6.0
08/27/2015	27	Aqualuer	19:56:00	20:23:00	5.0
		Truck		**Sum**	**351.0**
				Avg	**6.8**
				Min	**2.0**
				Max	**13.0**
				Grand Total	**351.0**